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Journal of the Alumni Association of the
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EDITED BY J. MONTGOMERY MOSHER, M. D.

VOLUME XL

Ἀσφαλὲς καὶ ἔμπεδον ἔστω τὸ σὸν ἔδος. Ἐκ σκότου μὲν ἔξαγε
φάος, ἐκ δὲ πάθους ἀναψυχὴν



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ALBANY MEDICAL ANNALS

Original Communications

PROCRASTINATION: ITS RESULT IN THE CARE AND TREATMENT OF THE EYE.

VICE-PRESIDENT'S ADDRESS.

*Read before the Medical Society of the County of Albany,
November 26, 1918.*

By CHARLES H. MOORE, M. D.,

*Instructor in Ophthalmology and Otology, Albany Medical College; Assistant Attending
Ophthalmologist and Otologist, Albany Hospital, Ophthalmic and Aural
Surgeon Child's Hospital*

The poet Whittier once wrote these lines:

“For of all sad words of tongue or pen,
The saddest are these, ‘It might have been.’”

Someone as a corollary to the above has added:

“But sadder than these we often see,
It is but hadn't ought to be.”

While thinking of a subject for this the Vice-President's Address, my mind kept constantly reverting to the evil consequences resulting from delay in the practice of medicine, and particularly so in that field of the healing art in which I am most interested, Ophthalmology. Therefore, instead of a scientific treatise on some interesting ocular condition, I intend to give a simple talk on a simple but important matter and have chosen for my subject, “Procrastination; Its Result in the Care and Treatment of the Eye.” The untoward results of delay in eye work are apparent to all and blame does not fall alone on either specialist or general practitioner. Parents and guardians are often responsible and frequently the patient, the one most vitally concerned, has but himself to thank for the evil that has come upon him.

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This paper could be filled with illustrative cases, taken from our records; but I will content myself by treating the subject in a broad and general manner, trusting that what I may say may cause you to think more seriously on this fault (shall I call it a minor sin?) than you may have done before. Do not think for a moment that I would criticise a careful study of cases and conditions before instituting treatment. This presupposes a knowledge of the subject and a mind trained to differentiate and decide wisely, but I would sound a warning against timidity, indifference or the neglected inaction that puts off for a more convenient season what should be done at once.

In no department of medicine is an early diagnosis and a prompt employment of remedial measures more important than in ophthalmic practice.

Even at the very threshold of life the innocent babe may experience the direful result of this procrastination. The prophylactic use of the silver nitrate in the eyes of the new born is sometimes put off until a swelling of the eye-lids and a discharge of pus from beneath them occur. True, this fortunately is not true of all cases of confinement but occurs frequently enough to count against some physicians or midwife. Even when the discharge appears there is often a further delay ere competent advice is sought. Ophthalmia neonatorum adds one more case to those of preventable blindness.

The baby grows, begins to notice objects, but parents observe a peculiar appearance about one of the child's eyes. It becomes more marked, a yellowish reflex is seen in the pupil, the iris changes in color. Parents neglect calling attention of their family physician to the condition and even after his advice is sought, watchful waiting is at times the only counsel given. When at last the eye-ball is removed for glioma of the retina it is too late to check the progress of the disease, and frequently after months of suffering death ensues. A life has been needlessly sacrificed.

Parents and relatives notice that the young child does not seem to fix its attention on objects though it otherwise develops normally in most respects. Although its attention is attracted by bright light, it moves its eyes from side to side aimlessly, as if

seeking what it cannot readily discern. Even a cursory glance shows the pupils grayish in color instead of the normal black. There has been some prenatal nutritive disturbance and total congenital cataract has resulted. Many times a wait of several years ensues before the advice for an early operation is heeded, and the result then obtained is not as good as anticipated.

Congenital cataracts demand early operation when the general condition is favorable. Early removal is of the greatest importance in order to prevent amblyopia from non-use, for obtaining better vision for causing disappearance of the nystagmus which impairs acute vision, and for promoting mental development.

The young child old enough to play with toys, to look at picture-books and small objects, in other words beginning to use his power of accommodation and the associated convergence of the visual axes, is noticed to have a "cast" in one eye or the other. This is frequently associated by the parents with some recent illness or attack of worms, and they wait for the eyes to become straight as health improves, this decision frequently concurred in by the family doctor. Sometimes years may elapse before any remedial measures are taken. The squinting eye not receiving images at the macula, lessens in visual acuity, and when finally competent advice is sought, operation is usually necessary to cure the strabismus and the squinting eye possesses little useful vision; amblyopia exanopsia might not have resulted and operation not been necessary, had the underlying cause of the squint been treated, a cycloplegic used and the error of refraction properly corrected.

There are other ocular troubles among these little ones that science, aided by skill, cannot help: eyes sightless from congenital defects or blind as the result of some neglected or maltreated inflammatory condition; vision, perhaps not even perception of light, or if more fortunate, so reduced, that much of the outerworld is beyond their power of comprehension if vision alone is to be their guide. Here it is our duty to insist that these children be placed in some school for the blind at the earliest age that it is possible for them to be taken from their home

surroundings, in order that they may be fitted to make the most of the senses still left to them.

It hardly seems probable that any acute inflammatory process about the eyes of a child would be left untreated, or inefficient and often decidedly harmful home remedies used for days or even weeks before some physician sees the case. Yet it is true, and these parents or guardians seldom seem to realize the harm they have done by their delay. How often are children brought to us, the face buried in their mother's arms, the lids tightly closed,—marked blepharospasm and photophobia. Had advice been sought earlier, a simple line of treatment, the correction of a faulty system of feeding and placing the child under proper hygienic surroundings would have quickly effected a cure of the phlyctenular conjunctivitis and keratitis, that perhaps has at this time left marked and permanent opacities upon the cornea. Equally inexcusable is the delay in properly caring for the various forms of conjunctivitis found in childhood; again time is lost in the home-treatment that cannot possibly take in consideration the etiological factor that is causing the trouble in that individual case, and when the patient reaches the specialist a lengthy course of treatment is often necessary, whereas if seen early a few days would have sufficed.

There is a conjunctival disease occurring at all ages, formerly more prevalent among children than at the present, important on account of its disastrous complications and sequelae which are responsible for many cases of partial or total blindness; it is highly contagious and in institutions if unnoticed may rapidly spread from one to another. Delay in isolating suspicious cases, or delay in giving proper treatment in the early stages, has, in days past, and alas, occasionally even at the present time, been responsible for allowing an epidemic of trachoma to gain such headway that months of treatment of many cases have been necessary instead of a few mild cases quickly cured.

When we stop to consider errors of refraction, we wonder at the lack of common sense shown by those in whose hands the welfare of the youth of our country is placed. It has only been recently that action has been taken to correct this abuse; now school physicians and nurses trained to notice and classify physi-

cal defects are alert to discover and to see that these faults of growth and development are corrected, or at least alleviated as much as possible, early in life. Ocular defects are among the most important, and as intimated above, errors of refraction uncorrected, bear a leading rôle. In spite of all efforts to impress upon the community the evil effects that result from delay, years sometimes elapse ere proper advice is sought. This is more often the case where, in spite of considerable deviation from the emmetropic eye, vision is perfect. What is the result?

Health impaired, frequent headaches, nervousness rampant, vision in many instances becomes lessened in acuity, in fact life is made a burden and the future welfare of the child imperiled by waiting.

Early in school-life or even prior to that period the child shows a disinclination to attempt close work except in the best of light, the book or object looked at is held close to the eyes, the eyelids become reddened along their free borders, conjunctival irritation is shown by excess in flow of tears. In some cases distant objects are blurred and indistinct, and if tested with lenses alone, they are apparently myopic. Left alone at this stage a true myopia may develop, but if taken in time and the refractive condition determined with the accommodation paralyzed by a cycloplegic and proper lenses ordered early, relief and comfort follow.

Frequently, however, the method is not pursued, but often waiting and doing nothing or waiting until after those incompetent to properly treat such cases have tried and attempted to fit the eyes, they finally reach the oculist. Concave lenses of considerable dioptric power before the eyes of the hyperopic are found; cylindrical lenses whose strength seems to have been determined by guess work and the axes of which by the same rule are fitted to the astigmatic.

The oculists' record books have very many cases of such character that they could report. In leaving this part of my subject let me earnestly warn against delay in refracting the child who, as it studies, sits with head bent close to the book, the figures on the blackboard a meaningless jumble of lines to him, though distinctly seen by his clear-eyed seat-mate. It is now March;

in September when the child entered school his vision for distance was acute and normal. Leave this child alone and a myopia is more than likely to develop, probably progressive in its character and often associated with choroidal and other intraocular changes. Is it wise to procrastinate here?

Time will not permit the consideration of many other conditions among children, where promptness means everything. Let us now look for a time at those of maturer years.

Purulent ophthalmia due to gonorrheal infection presents itself; dreadful in an adult, in its final result, unless active treatment is immediately instituted and carried out. Usually unilateral when first seen, the unaffected eye may escape scot free if properly protected at once. Would you feel justified in waiting at all before applying the Buller shield or deferring treatment? Delay may mean involvement and destruction of the cornea in each eye.

In iritis a permanently damaged eye through the formation of unbreakable posterior synechiae happens, because the thorough use of atropine instilled in the eye has not been early carried out.

There are some people who, able to reason correctly and to act at once in business or household matters, will allow vision to gradually slip away beyond recall even when warning has been given of such possibility. The habitual smoker whose foggy vision in the early part of each day has caused him to seek the advice of the oculist does so usually after weeks have elapsed; even then he is loath to stop the habit that is the cause of his trouble and delays until degeneration of the optic nerve fibers renders restoration of vision impossible.

In middle life difficulty arises in seeing clearly when reading or engaged in close work. Disinclined to face the truth that old age must come and presbyopia is one of its attributes, many wait even years beyond the time when this aid to near vision should have been sought. Irritable temper and a dull, heavy feeling in head are the least of the results of this waiting.

Others who have sought the relief that glasses afford at near work find that they soon have to change them for stronger, and even these latter are quickly discarded for others of greater power. Central vision may remain perfect, but the peripheral

field gradually contracts on the nasal side. Watchful waiting, often abetted by those who should know better, has allowed a simple glaucoma to progress so far that little hope for relief can be promised when at last the proper advice is sought.

Acute gastric disturbance, intense pain in head accompanied with vomiting, awakens someone after a hard and trying day or after some over-indulgence in eating and drinking, misled by the objective symptoms the attending physician may overlook for a time: the swollen lids, the congestion about the eye, the steamy cornea, the widely dilated pupil, the conjunctival chemosis, until finally when attention has been directed to the eye, blindness from an attack of acute inflammatory glaucoma has supervened. The picture is not overdrawn; every oculist has seen such cases.

Senile cataract is so often met with that almost anyone feels able to diagnose the condition and to suggest treatment in its incipient stage. The patient frequently waits until the cataract is nearly mature before seeking advice. While the majority progress from incipency to the mature stage in an uneventful manner and recover fine vision after the cataract has been removed by operation, there are some cases, however, where the delay in having a careful, thorough examination of the eyes made means much. Coexistent choroidal or retinal disease may have been present which might have been helped had an early ophthalmoscopic examination been made and the condition existing treated before the opaque lens made such an examination impossible.

What shall we say of the physician who, when a patient comes to him complaining of gradual failure of vision, his only examination of the case, a glance at the eyes and basing his opinion on a grayish reflex from the pupils, diagnoses the case at once as cataract and advises waiting till cataract is "ripe?" This advice repeated from time to time for a year or more, until vision has become so reduced that it is almost impossible for patient to get about alone, then with a letter to the oculist stating that cataract is now ripe, he is sent to have cataract removed, media perfectly clear, no evidences of cataract: vision lost through simple glaucoma. In one eye no perception of light.

Ophthalmoscopic examination at any time would have shown to the mere novice in eye work that there was no cataract. An over-drawn picture, not at all—an actual occurrence!

A patient with a malignant growth either extra-ocular or intra-ocular, in spite of repeated warnings given that surgical interference should be allowed, persists in waiting until even exenteration of the orbital contents fails to check the ravages of the disease.

No period of life is exempt from injury of the eye-ball and its surroundings. Here again that which should be done at the earliest possible moment is often neglected and valuable time is lost in the handling of these cases. Even such a simple matter as an abrasion of the cornea is unheeded until a superficial corneal ulcer results that might have been avoided had some mild antiseptic lotion, followed by a firm bandage, been used at the first. The foreign body that finds lodgment on the palpebral conjunctiva is allowed to remain for days, the irritation of the eye-ball caused by its presence being treated as conjunctivitis, when a simple eversion of the upper lid and a removal of the offending particle would have saved days of annoyance, if not worse. At times the foreign body imbedded in the cornea, instead of being removed at once, remains a source of irritation for days until when finally removed infection has taken place at the site of the injury and a traumatic corneal ulcer has resulted difficult to treat, which, in spite of all our treatment, may result in the loss of the eye.

Delay in caring for the cut and torn eyelid and instead of hardly noticeable scars, healing has occurred with marked deformity of lids and impairment of their function. Lime accidentally enters the conjunctival sac. Here quick action is necessary to remove as far as possible all particles and then neutralization of the caustic action of the lime. It does not take long to cause much injury to conjunctiva and cornea in spite of all later treatment.

Adhesions form between lids and the eye-ball, symblepharon; or the upper and lower lids become attached, ankyblepharon. This result is also apt to follow burns occurring from other sources, molten metal, caustics of various kinds or acids. Early

action is necessary, if we wish to obtain the minimum of destructive action.

How many penetrating wounds of the eye-ball might have had a different ending had those so injured been brought at once under the care of someone competent to treat such cases, the prolapsed iris replaced if possible or abscised when the wound was still open, and a clean healing resulting with function of eye but little impaired.

A piece of metal from a chisel strikes the eye with such force that it enters the eye-ball and is lodged somewhere in its interior. Sometimes so little trace of its passage can be seen that but little attention is paid to the injury until severe inflammatory reaction demands relief.

The nature of the injury should have made one think of the possibility of a foreign body entering the eye and a careful instead of perfunctory examination should have led one to such a conclusion. The X-Ray examination and localization of the body would have made possible its removal by magnet and the eye saved. Delay here has allowed an eye to be lost through iridocyclitis, or panophthalmitis.

Saddest of all are those cases where in spite of all warnings of the possibility of its occurrence sympathetic ophthalmia has been allowed to develop in the unaffected eye. Careless indifference, or watchful waiting for too long a period when the ciliary body has been involved by injury, has been responsible for this untoward result. Now active treatment is instituted, but frequently all measures to restore vision fail and even total blindness may ensue.

In closing this address, and I have far from exhausted material I might have used, I leave with you a phrase with which I began: "It might have been."

THIRD RESUSCITATION COMMISSION.

(UNDER THE AUSPICES OF THE COMMITTEE ON SAFETY RULES
AND ACCIDENT PREVENTION OF THE NATIONAL ELECTRIC LIGHT
ASSOCIATION.)

PROCEEDINGS AND RESOLUTIONS.

Edited by

PROFESSORS HOWELL, STEWART AND THOMSON.

The Commission met in New York at the Rockefeller Institute
Friday, May 17, 1918.

There were present at the meeting: Passed Assistant Surgeon
E. F. DuBois, U. S. N. R. F., of the Bureau of Medicine and
Surgery, Navy Department; Dr. D. L. Edsall, Professor of Medi-
cine and Dean, Harvard Medical School; Mr. W. C. L. Eglin,
Chairman of Committee on Safety Rules and Accident Preven-
tion of the N. E. L. A.; Dr. Yandell Henderson, Professor of
Physiology, Yale University and Consulting Physiologist of the
Bureau of Mines; Dr. Wm. H. Howell, Professor of Physiology
and assistant Director of the School of Hygiene and Public
Health, Johns Hopkins University, Member of the National
Academy of Sciences; Dr. Reid Hunt, Professor of Pharma-
cology, Harvard Medical School, *Secretary* of Commission; Prof.
A. E. Kennelly, Professor of Electrical Engineering at Harvard
University and the Massachusetts Institute of Technology; Dr.
Charles A. Lauffer, Medical Director of the Westinghouse Elec-
tric Co., Pittsburgh, Pa.; Dr. S. J. Meltzer, Rockefeller Institute,
Chairman of Commission, Member of the National Academy of
Sciences; Dr. Joseph Schereschewsky, Assistant Surgeon General,
U. S. Public Health Service; Dr. G. N. Stewart, Professor of
Experimental Medicine, Western Reserve University, Cleveland;
Prof. Elihu Thomson, General Electric Co., West Lynn, Mass.,
Member of the National Academy of Sciences; Lieut. Colonel
Edward B. Vedder of the Army Medical School; Major Frank
G. Young of the Ordnance Division of the War Department.

A telegram was received from Surgeon General Gorgas that
Dr. Charles H. Frazier, Professor of Surgery, University of
Pennsylvania is to represent his office. (In a subsequent com-

munication Major Frazier accepted his appointment.) Confer-ees: Mr. P. H. Bartlett, Philadelphia Electric Company; Mrs. Wills Maclachlan, Electrical Employers Association, Toronto, Canada; Mr. C. B. Scott, Chairman of the Sub-Committee on Accident Prevention N. E. L. A.; Dr. F. E. Schubmelh, General Electric Co., West Lynn, Mass.

The object of the Commission, the chairman stated, is to consider efficient methods of artificial respiration in emergency cases, *as they are met with in peace as well as in war*. For more than a century, England has had several life-saving societies, and many special commissions have been appointed to investigate the methods employed in resuscitation. In this country, about six years ago, a Commission on Resuscitation from Electric Shock was created for the first time, by the initiative of the National Electric Light Association. It is now generally recognized that efficient artificial respiration is, for such conditions, the best and practically the only means available for resuscitation. It requires but little consideration to realize that the need for an efficient means of artificial respiration is very wide-spread.*

Mechanical Methods. Dr. MELTZER demonstrated in the laboratory for physiology and pharmacology, the efficiency of the method of pharyngeal insufflation in an etherized dog after complete removal of the anterior wall of the thorax, in which the lungs and heart were exposed to full view.

Dr. ROSSITER of the Carnegie Steel Company demonstrated the latest device of the Pulmotor Company, which is not identical with the original pulmotor. He showed also the original pulmotor. He stated that he had resuscitated eight gas cases, in which the respiration had stopped. This was done by the original pulmotor in which he had more confidence.

Dr. JAMES M. BOOHER, Medical Director of the Life Saving

* For instance, in injuries to the head which stop respiration, injuries to the chest (especially double pneumothorax) in laparotomies during which the respiration ceases occasionally, in cases of shock which occur in peace and more so in the present war, in poliomyelitis with stoppage of respiration, in post-diphtheretic paralysis, in poisoning by opiates, by volatile gases (ether, chloroform, etc.) by mine and fuel gases, poisoning by magnesium salts, in electric shock and in drowning.

Devices Co., demonstrated the lungmotor. He showed a number of blood pressure tracings, taken from animals which had received artificial respiration by means of this apparatus. In reply to a question, Dr. B. stated that in these experiments the lungmotor was connected with the animal by means of a tracheal cannula. (In human cases the lungmotor is applied by means of a face mask.)

Manual Methods. Mr. EGLIN read a letter from Mr. M. W. Alexander of the General Electric Co., stating that he hoped the "Commission would be very definite in recommending the prone-pressure method, as experience has proved its value."

Mr. C. B. SCOTT stated that the Accident Prevention Committee of the N. E. L. A. had reached the point in its investigation where it felt that the prone-pressure method was best to recommend, bearing in mind that machines are not always available in emergencies. His own company had had nine successful cases of resuscitation by the prone method and three unsuccessful cases in which mechanical means were used.

Dr. SCHUBMEHL stated that the prone-pressure method has been most successfully applied by their two hundred and twenty-five first-aid men.

Mr. MACLACHLAN stated that he had the duty of training possibly three thousand men in the prone method. Their system required the men to practice this method at least once a month. The men are instructed not to desist in less than three and a half hours, and that not till then should they listen to advice from a physician who might tell the operator that the patient was dead.

The Secretary read the following parts of a letter from Professor Schäfer of Edinburgh to the Chairman: "The prone method has been adopted *exclusively* for about twelve years by the Royal Life Saving Society, the only important organization in the British Empire whose object is the resuscitation of the apparently drowned. It has also been adopted for several years by the London and other police force, by the Board of Trade, by the Army and the Navy." "The most important thing is in cases of drowning to have something ready which any man can use; which will effect respiratory exchange—whether exactly as much as normal, matters very little."

RESOLUTIONS ADOPTED BY THE COMMISSION.

In the discussion following the presentation of methods and evidence to the Commission, the following important facts were emphasized:

1. That in most accident cases no resuscitation apparatus is at hand for immediate use.
2. That reliance upon the use of special apparatus diminishes greatly the tendency to train persons in the manual methods and discourages the prompt and persevering use of such methods.
3. That police officers or physicians often interfere with the proper execution of manual methods, in that they direct that the patient be removed in an ambulance to some hospital, thus interrupting the continuance of artificial respiration.
4. That in many hospitals the members of the staff are not all acquainted with the methods of artificial respiration.
5. That in medical schools instruction is not properly provided for students in the manual methods of artificial respiration.

In view of these facts the following resolutions were adopted by the Commission:

1. The prone-pressure or Schäfer method of resuscitation is preferable to any of the other manual methods.
2. Medical schools, hospitals, fire and police departments, the army and navy, first aid associations, and industrial establishments in general, should be urged to give instruction in the use of the prone-pressure method of resuscitation.
3. Individuals who, from accident or any other cause, are in need of artificial respiration, should be given manual treatment by the prone-pressure method immediately on the spot where they are found. It is all important that this aid be rendered at once. The delay incident to removal to a hospital or elsewhere may be fatal, and is justifiable only where there is no one at hand competent to give artificial respiration. If complications exist or arise, which require hospital treatment, artificial respiration should be maintained in transit, and after arrival at the hospital, until spontaneous respirations begin.
4. Persons receiving artificial respiration should, as much as possible, be kept warm and the artificial respiration should be

maintained till spontaneous breathing has been permanently restored, or as long as signs of life are present. Even in cases where there is no sign of returning animation, artificial respiration should be kept up for an hour or more.

5. A brief return of spontaneous respiration is not a certain indication for terminating the treatment. Not infrequently the patient after a temporary recovery of respiration stops breathing again. The patient must be watched and if normal breathing stops, the artificial respiration should be resumed at once.

6. Artificial respiration is required only when natural respiration has ceased. In cases of simple unconsciousness from any cause in which natural respiration continues, artificial respiration should not be employed without medical advice.

7. The Commission recommends that in cases of gas asphyxiation, artificial respiration, whether given by a manual method or by special apparatus, should be combined when possible with the inhalation of oxygen from properly constructed apparatus.

8. With regard to the employment of mechanical devices for artificial respiration the Commission feels that it ought not at present to take a definite stand either for or against any particular form of apparatus. However, the Commission recommends that the use and installation of apparatus should be confined, for the present, to properly equipped institutions under medical direction. The Commission recognizes the great need of simple devices capable of performing artificial respiration reliably and efficiently. It therefore recommends a careful study of the problem, directed toward *the development of a reliable method appropriate for general adoption*. Such studies can best be carried on in properly equipped hospitals and laboratories which offer opportunities and facilities for critical observation and experimentation.

In view of the importance which the knowledge of proper methods of resuscitation possesses for public health and safety and considering the fact that many practitioners, members of hospital staffs and graduates of medicine are not thoroughly familiar with the methods of resuscitation, especially that of the prone-pressure method, the Commission recommends:

(a) That medical journals (and other scientific and practical journals which are interested in the problem of resuscitation) be asked to publish the resolutions adopted by the Commission.

(b) That a copy of these resolutions be sent to the medical colleges with a request that proper instruction in this subject shall be arranged for in the college schedules.

(c) That these resolutions be sent to as many hospitals as possible, with the recommendations that members of the house staff shall familiarize themselves with the methods of resuscitation.

(d) In order that the resolutions of the Commission may be brought to the attention of interested circles (fire and police departments, industrial plants, etc.), it was agreed that they be communicated to the Associated Press (by the National Electric Light Association).

It was voted that the Third Resuscitation Commission should be properly organized and continue its existence, ready to respond when requirements arise. The following officers were elected:

President, Dr. S. J. MELTZER

Vice-President, Dr. YANDELL HENDERSON

Secretary, Dr. REID HUNT

Treasurer, Mr. W. C. L. EGLIN

It was voted to appoint a committee for the collection of verifiable data relating to resuscitation. The President appointed to the committee:

Dr. D. EDSALL, Chairman

Dr. REID HUNT, Secretary

Prof. ELIHU THOMSON, and the President, *ex-officio*.

STATEMENT.

Dr. YANDELL HENDERSON qualifies his support of the resolutions as follows:

While I concur in a considerable part of the report of the Resuscitation Commission, I dissent from the statement in Resolution 8 recognizing "the great need of simple devices capable of performing artificial respiration reliably and efficiently."

Devices which are excellent from the mechanical standpoint are now available and widely sold; but the evidence regarding them indicates clearly, I believe, that even if these devices were on the spot where several gassings or electrocutions occurred, and if all the victims were treated with them, except one who was given manual (prone-pressure) treatment, this one would have much the best chance of recovery. In actual practice the apparatus is seldom right on the spot adjusted and ready. Critical time is lost, and thus in the above suppositious cases, as they actually occur, the only victim with any considerable chance of resuscitation (aside from those who recover spontaneously and are credited to the apparatus) is the one treated manually.

Even more important is the fact, demonstrated now by universal experience, that when apparatus is known to be obtainable, it is sent for and the manual method neglected. Thus to-day the apparatus in public use is on the whole contributing very materially to decrease the saving of life.

Correspondence

LETTERS FROM THE WAR.

NEUROSES AND PSYCHOSES IN BASE HOSPITAL No. 33.

7 December, 1918.

DEAR DR. MOSHER:

My work for the last few months has been most enjoyable. I had associated with me, Captain Devine, R. A. M. C., the former superintendent of this hospital, a most learned man and charming companion. We have worked together beautifully, he taking the psychoses and neuroses, and I doing the organic neurology. I picked out a fine ward on the lower floor, slightly isolated from the rest of the hospital and I immediately put up a big sign by the door, "Isolation; No Visitors." We had our own court yard, where we had games for the men and our own piazza, etc. I was surprised to find how much the men enjoyed a ward of their own, and as time went on a sort of spirit of pride grew up about Ward A1, much to my gratification. I picked my nurses and orderlies with care,

We had two rooms in my ward and many small side rooms. As we had three distinct classes of patients it was somewhat of a problem to know just how to arrange matters. I did not like the idea of having the psychoses and neuroses in one ward, so I finally put the psychoses in a tent in the court yard. We never had more than ten or twelve psychoses at a time; practically none from France, but all the kind that slipped through the camps at home and broke down on the way over or shortly after landing here. I learn from France that there have been very few psychoses in the American Army in France.

There have, also, been remarkably few neuroses, either in France or England. My knowledge of France comes from letters and talks with some of the men who have been doing work there, and of England, from my own experience. At Portsmouth we had the center for war neuroses in England and we never had more than thirty at any one time. I used to have about thirty to forty organics, so our whole little family was about seventy.

The many details, I must leave until we can talk them over some time together. "Interesting cases" and special treatment I must also leave. I will, however, jot down one or two conclusions as I look back over the work:

1. The number of psychoses or neuroses in the American Army has been extraordinarily small. This I think was largely the result of the "weeding out" process, so successfully carried out in our camps at home.

2. The neuroses all had a history of a more or less psychopathic disposition before the war.

3. The gross hysterical symptoms were rapidly and easily overcome, but the cases on a whole can never be cured so that one can guarantee "no recurrence." The term "*cure*" should be very guardedly used.

4. The amount of injuries to nerves and spinal cord is very large. They will form a large part of our work in reconstruction.

With kind regards,

Sincerely,

HENRY VIETS.

Editorial

We hear people every day, in talking of their physician, use language of this kind—"I own he is a very weak, silly man but he has had a great deal of experience"—or, "I grant you he is an ostentatious coxcomb, next to a fool in other respects but he is an excellent physician." They seem to think that common sense diverts a man from the study of his profession, like the French lady, who being told that her physician had not common sense replied, "So much the better; how can a man, who spends his time in studying common sense learn medicine, Monsieur Abbé—He who talks Greek like Homer does not know how to dance."

There never was a greater absurdity, however, than to suppose that a man of an uncommonly weak understanding can be a good physician; he may have a great deal of experience; he may possibly be even a man of learning; but without natural acuteness and good sense there never was a good physician since the world began; the thing is literally impossible.

Medical Sketches

JOHN MOORE



The Year Book of the Medical College for the current year has recently been published. As a register of the changes in the college and advance in medical education it becomes an important pamphlet for physicians and particularly for the alumni and friends of the institution. The evidences of change and progress are especially revealed in two directions: the closer affiliation of the medical department with the university, and the increased attention to the training of students in the first year. The former was symbolized in June by the graduating exercises held in Schenectady under University auspices. The candidates for the degree in medicine assembled with those for academic degrees, and with cap and gown, took part in the procession and listened to the addresses which make the charm and the dignity of a University Commencement. The ceremony is always impressive, and the initial step, having been taken by the medical department, may lead the way to a general participation by all the affiliated institutions. The historical fact of an ambition in

**The
"Announce-
ment for
1918-1919."**

Albany, existing years ago, for the development of a university, has been recorded in the ANNALS, and no time or occasion should be neglected to promote its accomplishment. The foundation has been laid upon a reasonably secure basis, and cooperation and energy are all that is needed to achieve the long desired consummation. The School of Engineering in Schenectady, from propinquity and interchange with the great electrical institution of that city, has gained a place second to none in this country; the department of arts and sciences maintains its pristine excellence, and the technical schools of pharmacy, law, astronomy and medicine in Albany have been recognized for the better part of a century as eminent among professional institutions and as graduating men who have been leaders in thought and in public life. It may be a matter of surprise that the amalgamation has not been affected long before. The Capital of a great state, with the resources and equipment of its administrative activities, offers opportunities not to be excelled, and only occasionally equalled. Such a situation really needs for the capstone of its fame, the evidences of culture to be given by a higher institution of learning.

The Medical College gives other proof of the application of the "University Idea," in the requirement of the two year academic "premedical course." The announcement describes this requirement in full, and no students are received who have not completed the two years of premedical work. This course is given in Union College to meet the recommendations of the American Medical Association, and, as arranged at Union, gives attention to broad general education, including modern languages, history, literature and rhetoric, in addition to elementary study in natural science. By a rule adopted a few years ago the rating of students at Union is gauged to some reasonable extent by the literary excellence of their examination papers, and accuracy and lucidity in expression has become an essential feature of their college work.

Fully as important as this preparatory discipline is the induction into actual medical study when the student enters upon his technical work. The most pressing need is that he should know how to study. It is generally acknowledged that the most glaring

defect in the instruction given in medical colleges in the past has been the disregard of systematic mental training. The demand upon pupils has been rather that they should acquire and memorize an enormous number of facts without recognition of their relations with one another or of their practical application. Though he overcomes this handicap to greater or less extent as his work advances, it remains a serious embarrassment throughout his college course. As the foundation of his education is knowledge of anatomy, the emphasis of his introductory study is placed upon this subject. Dr. Baldwin, the professor of anatomy, has taken a broad view of the responsibility laid upon him, and has become, in a way, the mentor and guide of the beginner. The course in anatomy is not left to the individual student, as a series of individual dissections, but small groups of students, under the direction of the instructor, meet, work, discuss and argue upon the revelations of the scalpel and of the relations and evolution of the structures as they appear not only in man but in the lower orders from which they have been adapted. To be met at the door by an instructor who leads the way into the mazes and difficulties of an intricate and complicated life-study, is a novelty for medical students, which will be understood by the generations who have gone before, and who will recall the anxiety and dismay with which they pored over an enormous and appalling volume from which they hoped to memorize enough facts to present a saving appearance before a professor in a "quiz." The voluntary assumption by the department of anatomy of this duty, not only to teach anatomy but to introduce the student to right methods of learning anything, and to approach his subjects with the interest and enthusiasm which the pursuit of medicine stimulates, is not the least of the concessions to a higher learning. Its influence is felt throughout the four years, and, if the pupil fails in this preliminary test, his lack of adaptability, thus early discovered saves him the time, the money and the humiliation of rejection after four years of misdirected energy, and he has an early suggestion of the benefit of a more congenial calling.

The advisability of education in preventive medicine has had increasing attention in the curricula of recent years. More care

is given to the study of public health, and this year two courses of lectures, demonstrations and practical laboratory and field work will be provided, as post-graduate work for physicians and health officers. These courses meet the requirements of the Public Health Council, which demand of health officers that they shall complete a course of at least six weeks at an educational institution, with examinations and certificate. The excellence of this course is assured by the participation in it and direction of it by the State Department of Health.

The ANNALS has already published the report on the organization of Base Hospital No. 33, which is the combined offering of the Medical College and the Albany Hospital to the prosecution of the War. This Base Hospital by no means represents the sum total of the obligation assumed by these institutions, if the long list of alumni of the College and former internes of the Hospital, who have voluntarily enlisted, may be regarded as attributable to the patriotism of Albany Medicine. But it is a crystallization of effort, and to some extent, a rather exceptional demonstration of effective organization. The College itself wins additional laurels from the war activities of its corps of instructors. To Dean Ordway and Major Elting belongs the credit of the inception and organization of the Base Hospital. The College is entitled to further recognition of loyalty in the long list of instructors who have entered upon voluntary military service. At some future day perhaps the Alumni Association will undertake the installation of a tablet in the College hall in commemoration of its members who have responded to the call of their Country, and several of whom have paid the highest toll. For the present there may be recorded here the names of the faculty who constitute the honor roll:

EDWARD WATERBURY BECKER

ARTHUR BENSON

ERASTUS CORNING

JOSEPH LEWI DONHAUSER

MALCOLM DOUGLAS

EDWIN LYONS DRAPER

LAWRENCE JOSEPH EARLY

ARTHUR WELLS ELTING
LEMUEL WHITTINGTON GORHAM
CLARENCE FLACK GRAHAM
PETER LYONS HARVIE
CLINTON BENJAMIN HAWN
JOHN LUVERNE HEMSTEAD
JOHN EDWARD HESLIN
ROLAND G. HOLT
THOMAS WILLIAMS JENKINS
WILLIAM GEORGE KEENS
JOSEPH ALOYSIUS LANAHAN
ANDREW MACFARLANE
JOSEPH PATRICK O'BRIEN
HENRY LARNED KEITH SHAW
JOHN FORREST SOUTHWELL
JAMES NEWELL VANDER VEER

To them the glory of unalloyed patriotism! Their duties in the College have been assumed by those who are left behind that in their more quiet way the work of preparation for greater duties may continue. All unite, either in the tumult of war or in the steadier paths of peace, to give their best to the great cause to which the nation is committed.

Surely the relatively small part which our institutions play in this great world tragedy is worthy of their honorable traditions of many years.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

BUREAU OF VITAL STATISTICS.

DEATHS FOR MONTH OF NOVEMBER, 1918.

Consumption	14	Bright's Disease	12
Typhoid Fever	0	Apoplexy	10
Scarlet Fever	0	Cancer	15
Measles	0	Accidents and Violence.....	9
Whooping Cough	0	Deaths under 1 year.....	20
Grippe	63	Deaths over 70 years.....	37
Diarrheal Diseases	5	Death rate	22.59
Pneumonia	13	Death rate less non-residents	19.13
Broncho Pneumonia	9		

Deaths in Institutions.

	Non-res.	Res.		Non-res.	Res.
Albany Hospital	7	16	Maternity Hospital	1	1
Albany Hospital Camp..	3	1	C. F. of L. Camp.....	1	0
Child's Hospital	0	1	U. S. Infirmary.....	2	0
County Hospital	3	3			
Homeopathic Hospital .	5	14		30	49
Hospital for Incurables.	5	1			
Public Places	1	2	Births		123
St. Peter's Hospital....	2	10	Still Births		3

DIVISION OF COMMUNICABLE DISEASE.

Typhoid Fever	2	Whooping Cough	11
Scarlet Fever	1	Tuberculosis	25
Diphtheria and Croup.....	8	Pneumonia	54
Chickenpox	11	Mumps	8
Smallpox	0	Influenza	94
German Measles	1		
Measles	0	Total	215

Number of days quarantine for scarlet fever:

Longest..... 0 Shortest..... 0 Average..... 0

Number of days quarantine for diphtheria:

Longest..... 33 Shortest..... 10 Average..... 18

Fumigations:

Rooms..... 469 Buildings..... 65

Milk bottles disinfected 125

*Communicable Disease in Relation to Schools.*Reported
D. S.F. M.

Public School No. 21.....	1	..	..
Lady of Angels School.....	1	..	..

NURSE'S REPORT.

Tuberculosis.

Living cases on record November 1, 1918..... 879

Cases reported:

By card	20	
Dead cases by certificate.....	5	25

904

Dead cases previously reported..... 9

Dead cases not previously reported..... 5

Removed 3 | 17 |

Living cases on record December 1, 1918..... 887

Total tuberculosis death certificates..... 14

Non-resident deaths:

Albany Hospital Camp	3	
C. F. L. Pavilion	1	
County Hospital	1	
Albany Hospital	1	6

Resident deaths | 8 |

Visits to cases of tuberculosis..... 58

Miscellaneous visits | 12 |

LABORATORY REPORT.

Diphtheria.

Initial Positive	9	Unsatisfactory	2
Initial Negative	96		
Release Positive	15	Total	232
Release Negative	110		

Sputum for Tuberculosis.

Positive	33	Suspicious	2
Negative	142		
Unsatisfactory	2	Total	179

Widals.

Positive	2	Negative	3
		Total	5

Miscellaneous.

Wassermann tests	62	Milk analyses	81
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Division of Sanitation.

Complaints	45	Reinspections	61
Inspections	52	Plumbing	8
Plumbing	2	Sanitary	53
Sanitary	50		

HEARINGS.

Hearings	6	Cases heard	7
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Class of Cases.

Closets	3	Plumbing	3
Drain ..	1		

Disposition of Cases.

Reinspection	7
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DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections	67	Plans submitted	4
Old Houses	62	Old Buildings	4
New Houses	5	New Buildings	0
Permits issued	63	Houses examined	8
Plumbing	63	Re-examined	88
Building	0	Valid	5
		Without cause	3

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	19	Cats removed	109
Dogs removed	39		
		Total	167

DIVISION OF MARKETS AND MILK.

Public market inspections..	11	Sediment tests	36
Milk depots inspected.....	16	Chemical tests	22
Stores inspected	79	Cows examined	246
Milk cans inspected.....	363	Cows quarantined	3
Dairies inspected	15	Cows removed	1
Lactometer readings	133	Complaints investigated	7
Temperature readings	133	Cats examined for rabies...	1
Fat tests	42		

MISCELLANEOUS.

Cards posted for communicable disease	8	Vaccination dressings	14
Cards removed	4	Cases assigned to health physicians	46
Notices served on schools...	41	Calls made	87
Notices served on stores and factories	4	Employment certificates issued to children.....	24
Postal card returns sent to doctors	7	Garbage collected from 1st District	195 bbls.
Postal card returns received from doctors	4	Garbage collected from 2nd district	171 bbls.
Inspections and reinspections	11	Garbage collected from 3rd district	217 bbls.
Vaccinations	25		

Society Proceedings

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.

The minutes of the regular monthly meeting of the Medical Society of the County of Albany, held at the Albany County Court House, Albany, N. Y., Monday, September 30, 1918.

Meeting called to order by the President, H. E. LOMAX, at 9 p. m.

Report of Officers and Committees

Board of Censors: Reports favorable on the applications of F. B. MAGUIRE and H. F. VAN LOON.

The certificate of the Hungerkill Dairy was discontinued. The St. Croix Dairy is now the only one selling certified milk in Albany. Dr. ROONEY advised milk seals a method of confiscation if necessary.

Election of Members

Ballots were taken on the names of HARRY F. VAN LOON and FRANK B. MAGUIRE.

Ballots on the application of HARRY F. VAN LOON. Number of ballots, 15; affirmative, 13; negative, 2; blank, 0.

Ballots on the application of FRANK B. MAGUIRE. Number of ballots, 15; affirmative, 15; negative, 0; blank, 0.

Chair declared H. F. VAN LOON and F. B. MAGUIRE elected to membership.

Tellers were Drs. C. G. HACKER and ELLIS KELLERT.

Unfinished Business

Dr. BEDELL gives thanks of State Society for the help of the County Society at the last State meeting—it was the first meeting in the last four years that there was not a deficit.

New Business

Dr. J. F. ROONEY discussed the question of National, State and County Medical Defense Committees. Moved that Albany County Committee of

Medical Defense be requested to give a report at next County Society meeting with a presentation of appraisal lists of physicians. Dr. BEDELL spoke on the meeting of the American Medical Association, House of Delegate. Discussion of Medical Section of Council of National Defense. Motion made that the meeting proceed to the Scientific Programme. Motion carried.

Scientific Programme

Röntgenology of Stomach and Intestine, W. H. HAPPEL, M. D.

Lantern Slide Demonstration, discussed by Dr. ROONEY.

Dr. HAPPEL sums up.

Reading of Minutes

Minutes read, corrected and approved.

Meeting adjourned, 11:50.

E. S. HASWELL, *Secretary*.

The minutes of the regular monthly meeting of the Medical Society of the County of Albany, held at the Albany County Court House, Albany, N. Y., Tuesday, November 26, 1918.

Meeting called to order by the President, H. E. LOMAX, at 9 p. m.

Report of Officers and Committees:

Board of Censors: The Board of Censors had reported favorable on the applications of M. ARONOWITZ and T. S. WEST.

Legislative, Publication, Public Health and Milk Commissions.—No report.

Report of memorial committee on J. H. BLATNER. Voted that the report be spread in full on minutes and a copy sent to the family. Committee consisted of A. VANDER VEER, G. W. PAPEN and F. L. CLASSEN.

Report of memorial committee on W. F. CONWAY. Voted that the report be spread in full on the minutes and a copy sent to the family. Committee consisted of E. S. HASWELL, W. EGERTON and O. A. DRUCE.

Medical Defense Committee

Dr. ROONEY, on two questions of information: (a) Whether or not the Medical Defense Committee was appointed by and responsible to the County Society? (b) Whether its members had taken any federal oath?

Voted that the report of the Medical Defense Committee be postponed until after the Vice-President's address.

Scientific Programme

Vice-President's annual address, CHAS. H. MOORE, M. D. Moved by Dr. E. A. VANDER VEER that a vote of thanks be given Dr. MOORE. Amended by Dr. ROONEY to a rising vote of thanks. Carried.

Dr. KINNE moved to adjourn. Motion not entertained by the chair.

Medical Defense Committee discussion and question information.

Dr. ROONEY asked the chair to rule whether the Defense Committee was appointed by and responsible to the County Medical Society. The

chair ruled that the Medical Defense Committee was appointed by and responsible to the County Medical Society, and ordered the Secretary to read the report of the Medical Defense Committee. The Secretary stated that the Auxiliary Medical Defense Committee was not appointed by the County Society, and was in no way responsible to it. The President ordered the Secretary to give a report on the Medical Defense Committee, which was done.

On motion of Dr. ROONEY it was voted that the Auxiliary County Committee of the Medical Society of the County of Albany, attached to State Committee, Medical Section, be discharged from its duties, as the need of it has ceased, and be given leave to present any further report it chooses to make or any explanation of report presented at this meeting and that a copy of this report with the list (so-called appraisal list) become a part of the minutes of this Society.

On motion of Dr. ROONEY it was voted that the debts of Defense Committee, incurred during the pursuit of its labors, not to exceed twenty dollars (\$20), be approved and paid out of the treasury of Society.

It was voted that the dues of those twelve men, in active medical service on July 1, 1917, who were delinquent, be also paid for 1918.

Voted that Treasurer be authorized to pay 1917 dues of men, if in service prior to July 1, 1917. If otherwise credited by State Society, that the Treasurer of State Society be requested to refund the same.

Reading of Minutes

Voted that reading of minutes be postponed until December meeting.

Meeting adjourned, 11 o'clock.

Members present: Drs. BEDELL, CLASSEN, CURTIS, F. C. CONWAY, DRUCE, HARRIG, HASWELL, KINNE, LOMAX, J. A. LYONS, MERRILL, MOORE, McCORMICK, PADULA, ROONEY, TODD, W. B. D. VAN AUKEN, E. A. VANDER VEER, and WORRELL.

Report of Memorial Committee for William Francis Conway

It is the painful and sorrowful duty of this committee to inscribe the memorial to their one-time classmate, colleague, and friend, WILLIAM FRANCIS CONWAY, M. D.

To those who had the privilege,—yes, and the honor—of intimately knowing him, there is no tribute too great nor praise too high to honor his memory. He possessed to a superlative degree those sterling qualities that characterize the best and noblest type of American gentleman and citizen, also a loyalty to his patients and a devotion to his profession that are worthy of emulation.

His numerous unvaunted deeds of charity and acts of self-sacrifice stamped him as one who loved his fellow-men, while during his professional duties of the so-called "Spanish influenza" epidemic he ignored the grave danger of personal infection, although he had a premonition

that it would prove fatal to him, thus demonstrating that modest heroism which shuns publicity.

It is, indeed, lamentable that one in the prime of his manhood, ever demonstrating a professional ability of rare brilliancy, should be thus suddenly taken from his cherished hopes, desires and ambitions. After a brief and most severe illness, he departed from temporal life at half-past four in the afternoon of November 1, 1918.

He was born June 6, 1887. His preliminary and academic education were obtained at St. Joseph's Academy from which he graduated in 1903. He then attended the Albany Business College and was later stenographer and ticket agent at the Peoples' Day Line office, this being merely an event prior to his entrance upon the studies for his life's work. In the fall of 1905 he entered the freshman class of the Albany Medical College from which he graduated in 1909. During his senior year he was president of Alpha Gamma Chapter of the Phi Delta Medical Fraternity and was alternate valedictorian of his class. Among his classmates he was universally popular because of his unfailing good nature, his congenial disposition and his democratic temperament.

After graduation he served most competently as interne at the Homeopathic Hospital, Albany, N. Y., and the year thereafter he studied diseases of the nose, throat, eye and ear, at the New York School of Ophthalmology, and at the New York Eye Infirmary.

He began to practice his specialty at Albany, N. Y., in 1911. He was a member of the Knights of Columbus and Albany Lodge, No. 49, Benevolent Protective Order of Elks. He was a devoted catholic, being a member of St. Vincent de Paul's parish, and his daily life always measured up to the standards of his faith.

He was one of the attending nose, throat, eye and ear specialists at the Homeopathic Hospital Dispensary; and a member of the Medical Society of the County of Albany, the Medical Society of the State of New York, the American Medical Association, the Albany County Homeopathic Society, the New York State Homeopathic Society and the American Institute of Homeopathy.

His death has left a great void in his circle of friends, for among his fellows he received that rare and peculiar form of affection which men so seldom manifest toward each other.

He is survived by his wife, Mrs. Lucy Conway, a daughter Margaret, a son William, his father Michael F. Conway, a brother John, and a sister Miss Rhea Conway.

To his friends and associates we extend our condolence, while for the bereavement and tribulation of his family we have the utmost sympathy and compassion.

Therefore, be it resolved that the Medical Society of the County of Albany of the State of New York herewith pays tribute to the memory of its late member and colleague, William Francis Conway, and that it

causes the report of his memorial committee to be spread in full upon the minutes, and that a copy of the same shall be presented to his family.

E. S. HASWELL.

W. C. EGERTON.

O. A. DRUCE.

Election of Officers

President: Tellers, C. W. L. HACKER and A. J. BEDELL. Dr. BEDELL nominated CHAS. H. MOORE. The Secretary requested the privilege of casting one vote. The Secretary was authorized to cast one ballot. Dr. MOORE declared unanimously elected.

Vice-President: E. E. HINMAN nominated Dr. W. B. SABIN. Nomination closed. Secretary authorized to cast one ballot. Dr. SABIN declared unanimously elected.

Secretary: Dr. ROONEY nominated Dr. PERCIVAL W. HARRIG. Nominations closed. Secretary cast one ballot. Dr. HARRIG unanimously elected.

Treasurer: Dr. HARRY RULISON nominated Dr. JOSEPH A. COX. Nominations closed. Secretary cast one ballot. Dr. COX declared unanimously elected.

Censors: Dr. BEDELL nominated Drs. JOHN A. SAMPSON, W. H. HAPPEL, LA SALLE ARCHAMBAULT, E. E. HINMAN, and HOWARD E. LOMAX. Nominations closed. Secretary cast one ballot for the nominees, who were declared unanimously elected.

Delegates for State Society: Dr. ROONEY nominated HENRY L. K. SHAW; Dr. CONWAY nominated ARTHUR J. BEDELL; Dr. ROONEY nominated E. E. HINMAN. Nominations closed. Secretary cast one ballot. Nominees declared unanimously elected.

Alternate Delegates: Dr. CLASSEN nominated Dr. T. W. JENKINS; Dr. HAPPEL nominated Dr. TIFFANY LAWYER; Dr. ROONEY nominated Dr. N. K. FROMM. Nominations closed. Secretary cast one ballot. Nominees declared unanimously elected.

Unfinished Business

Auditing committee reports accounts of Treasurer correct. Report of auditing committee accepted and committee discharged with thanks.

Motion of Dr. ROONEY, it was voted that the Treasurer's report be accepted and that the report of the auditing committee be attached thereto.

New Business

The President welcomed the return of Major H. L. K. SHAW, who gave an informal address on medical training camp life.

President-elect takes the chair; Dr. ROONEY expresses appreciation of Society to retiring President, H. E. LOMAX. Moved by Dr. ROONEY that the Society convey its thanks to retiring President by standing vote. Unanimously carried.

Meeting adjourned, 10:45 p. m.

Members present: Drs. BALL, BEDELL, CONWAY, CONGDON, CLASSEN, DRAKE, FROMM, GREENE, HARRIG, HASWELL, HINMAN, C. W. L. HACKER,

HAPPEL, KINNE, LOMAX, LAWYER, LYONS, CHAS. H. MOORE, MERRILL, MCCORMICK, PADULA, ROONEY, RULISON, H. L. SHAW, F. WILLIAMS, and WORRELL.

The annual meeting of the Medical Society of the County of Albany, held at the Albany County Court House, Albany N. Y., Friday, December 13, 1918, at 8:30 p. m.

Meeting called to order by the President, H. E. LOMAX.

Minutes of the November meeting read and corrected. Voted to strike out the sentence, "Five men left the meeting, so from that time on there was not a quorum present."

Report of Officers and Committees:

(a) Secretary: On motion of Dr. ROONEY it was voted that report be accepted and spread in full on minutes.

(b) Treasurer: Report read, on motion of Dr. ROONEY, moved that a regular course be followed and that auditing committee of two be appointed to audit the books. Drs. CLASSEN and HAPPEL appointed auditing committee.

(c) Board of Censors, (d) Public Health, (e) Legislative, (f) Publication Committees. None. (g) Milk Commission: The report accepted of C. W. L. HACKER.

Election of Members

Ballot on the application of MILTON ARONOWITZ. Teller, FRANK J. WILLIAMS. Number of ballots, 21; affirmative, 21; negative, 0; blank, 0.

Ballot on the application of THEODORE S. WEST. Teller, TIFFANY LAWYER. Number of ballots, 21; affirmative, 21; negative, 0; blank, 0.

The chair declared Drs. ARONOWITZ and WEST unanimously elected.

The annual report of the Secretary of the Medical Society of the County of Albany, the Third District Branch of the Medical Society of the State of New York, given at the annual meeting of the Society held at the Albany County Court House, Friday, December 13, 1918, at 8:30 o'clock.

The Secretary has endeavored to fulfill all of the duties of his office.

There have been eight regular meetings on the following dates: January 9, 1918; February 28, 1918; March 28, 1918; April 30, 1918; May 16, 1918; June 28, 1918; September 30, 1918; November 26, 1918; the annual meeting, December 13, 1918.

All correspondence has received prompt and careful attention. Notices of meetings have been issued as early as possible. All new members have received due notification of their election by mailing to them a certificate of membership. Delegates to the Third District Branch and to the House of Delegates of the New York State Medical Society have received their credentials. All members appointed to special committees

have been informed thereof. Applicants for membership mailed the necessary blanks.

A complete and revised roll of the members of the County Society is herein contained, giving the name, address, college and year of graduation, and date of registration in the County Clerk's Office. And also a similar roster of the practicing physicians in the county, who are not members of the County Society. In conformance with the by-laws, a copy of these two rolls have been mailed to the Secretary of the Medical Society of the State of New York.

The following members of the Medical Society of the County of Albany in active service:

WILLIAM D. ALLEN	FRANK H. HURST
FREDERICK N. BIBBY	THOMAS W. JENKINS
JOSEPH BOWERS	HARRY V. JUDGE
J. HOWARD BRANAN	JAMES M. KEELING
MORRIS BELLIN	WILLIAM G. KEENS
ERASTUS CORNING	JOSEPH A. LANAHAN
JOSEPH COX	H. JUDSON LIPES
ALBERT M. DICKINSON	ANDREW MACFARLANE
JOSEPH LEWI DONHAUSER	JAMES E. MALONEY
T. FREDERICK DOESCHER	FRANCIS B. MAGUIRE
MALCOLM DOUGLAS	LOUIS B. MOUNT
EDWIN L. DRAPER	CLARENCE E. MULLENS
ARTHUR W. ELTING	JOSEPH P. O'BRIEN
NELSON K. FROMM	GEO. W. PAPEN, JR.
EMANUEL K. FREUND	GEORGE B. RANDALL
LEWIS H. GAUS	HENRY L. K. SHAW
HENRY B. GILLEN	JOHN F. SOUTHWELL
L. WHITTINGTON GORHAM	RALPH POST
PHILIP C. HACKER	EDWARD A. STAPLETON
CLINTON B. HAWN	JAMES VANDER VEER
JOHN E. HESLIN	HARRY F. VAN LOON
THOS. M. HOLMES	HOWARD VAN RENSSELAER
WILLIAM P. HOWARD .	

There have been four applications for membership presented to date, two of which have been accepted. The other two to be balloted on to-night. They are as follows:

MAGUIRE, FRANCIS B., September 30, 1918; VAN LOON, HARRY F., September 30, 1918; ARONOWITZ, M., and WEST, T. S., December 13, 1918.

The following physicians have registered at the County Clerk's Office during 1918:

From January, 1918, to December 13, 1918, there has been nine licensed physicians registered in the County Clerk's Office.

VAN DEUSEN, ———, Albany, N. Y. No. 14165. January 7, 1918.

AGUILAR, FERNANDO, Albany, N. Y. No. 13784. February 21, 1918.

MAGUIRE, FRANCIS B., Albany, N. Y. No. 14212. February 28, 1918.

CARLISLE, CHESTER LEE, Albany, N. Y. No. 3879. May 10, 1918.

BOEHM, WILHELM, Eclectic Medical College of New York. May 23, 1918.

CANDILA, NICOLA, University, State of New York. No. 68 (1114).
Licensed ——— 24, 1892. Registered June 17, 1918.

BARROW, FRANKLIN W., University of Buffalo, N. Y. Diploma of May 2, 1893. Registered November 7, 1918.

DELEHANTY, EDWARD THOMAS, Albany, N. Y. University of State of New York. No. 14587. November 18, 1918.

CARROLL, HERBURT F., Albany, N. Y. No. 14582. December 3, 1918.

Two of our members have passed to their eternal resting place, namely, Drs. W. F. CONWAY and J. H. BLATNER.

Our total membership stands to-night at 170 members

As nearly as the Secretary can estimate, there are approximately 300 practicing physicians in the County of Albany.

E. S. HASWELL, *Secretary*.

Annual Report of Treasurer, December 13, 1918

Disbursements		Receipts	
Printing	\$95 96	Received in 1918 dues..	\$780 00
Postage	10 00	Received in 1917 dues..	126 00
Treas. Bond	5 00	Received in 1915-16 dues	20 00
Cal. Light	6 00	Balance on hand	308 00
Janitor Ser.	6 00		
A. J. Bedell, Chair.....	300 00	Total	\$1,234 00
Albany Med. Annals ...	50 00	Total Disbursements	1,102 06
Dues to State Treas....	627 00		
Albany Hardware & Iron		Balance	\$131 94
Co.....	2 10		
Total			
\$1,102 06			

L. R. WORRELL, M. D., *Treasurer*.

Albany, N. Y., December 13, 1918.

The Auditing Committee of the County Society of Albany herewith reports the accounts of the Treasurer correct.

(Signed) FREDERICK L. CLASSEN.

W. H. HAPPEL.

Medical News

WOUNDED IN ACTION.—Dr. H. JUDSON LIPES (A. M. C. '97), Major in the United States Army, attached to the Sixteenth Field Artillery, sustained a compound fracture of the leg in the fighting between Verdun and the Meuse River, on October 2, 1918. Major Lipès participated in the three big drives of the American troops at Chateau Thierry, St. Mihiel and Verdun.

The wound was sustained in the following manner:

Major Lipès, with several other men, occupied a small building near the front lines as a sleeping place. Word had been brought to the troops that a heavy gas barrage was to be sent over by the Germans and preparations were made for it. The attack started early in the morning and during the shelling, a high explosive shell struck a corner of the small building, tearing one end of it away. A fragment of the shell struck Major Lipès in the leg and resulted in a compound fracture. Another piece of the shell tore away the gas mask container. The metal container prevented the splinter from entering the body. The gas attack turned out to be a no-poison gas, and this fact was also fortunate for the shell made the mask useless. Major Lipès was taken to the rear in an ambulance, under heavy shell fire the entire distance, and was placed in the evacuation hospital at Souilly. Later he was transferred to base hospital 44 at Pougues les Eaux. He was transferred to nine hospitals before he was finally sent to the United States.

In describing the fighting near Verdun, Major Lipès said the German artillery, at times, was plainly in view of the American troops. At all times, he said, both armies were in constant contact, and the fighting was most severe.

Following one of the advances of the troops, Major Lipès entered a small summer cottage, which a few hours previous had been the quarters of a German officer. Making his headquarters in the building, he retired for the night. He was awakened early in the morning by machine gun bullets smashing the glass in the windows. Upon investigation, he discovered his regiment had been recalled during the night, so that he was located between the two armies. By way of a rear door, he escaped from the building and was compelled to run several hundred yards in order to reach the American positions. All this time he was under the fire of machine gunners, who fired more than two hundred shots at him, none of which took effect, although they were dropping very close.

Major Lipès has described the big drives made by the American soldiers; in many cases it was necessary for the artillery commanders to consider new positions days in advance in order to keep up with the incessant rush of the infantry. These advances were made in the face of heavy machine gun fire. The German army had no infantry; almost every man was supplied with a machine gun, and the ground was covered with nests.

In discussing atrocities committed by the German army, which he witnessed, Major Lipes says in all cases where evacuation hospitals were bombed, it was a case of deliberate brutality on the part of the enemy airmen. Every hospital was marked with a red star fifty yards square and they were illuminated at night. These markers were easily distinguished at any altitude. Another case of wanton destruction was the destruction brought to buildings that could have been spared. Timed bombs would be placed in the structures and, when the American army entered the cities, they would be exploded, in many cases killing several of the soldiers. The placing of conspicuous objects with bombs attached in places where soldiers were sure to congregate was another phase of German wickedness. One case of this sort was when a soldier picked up a small ring that had been laid on the ground, and was immediately killed by the bomb connected to the ring by a string, he said.

Major Lipes has been in France since May 23, 1918. At the outbreak of the war he was located at the base hospital at Camp Jackson. Later he was transferred to hospital 44, as chief surgeon. He requested to be assigned to a line regiment and was detailed to the Sixteenth field artillery. He remained with this battery for the remainder of the war.

PERSONAL.—Dr. WALTER D. McKENNA (A. M. C. '11), ranking as Captain, U. S. A., has received the distinguished honor of detail as military attaché to the International Peace Commission about to convene at Versailles. Captain McKenna has been in France since early in the War, having been stationed in Paris.

—Dr. ROY L. LEAK (A. M. C. '98), recently Medical Director at the State Hospital for the Insane, Columbia, S. C., has been appointed Assistant Superintendent of the Connecticut Hospital for the Insane at Middletown, Conn.

—Dr. BENJAMIN H. SHAPIRO (A. M. C. '15), has resigned as Medical Interne at the Brooklyn State Hospital, Brooklyn, N. Y., to enter private practice.

—Dr. LESTER E. SANFORD (A. M. C. '16), has been promoted to Assistant Physician at the Binghamton State Hospital, Binghamton, N. Y., and is at present in military service.

MARRIED.—Dr. LASALLE ARCHAMBAULT (A. M. C. '02), Professor of Neurology in the Albany Medical College, and Miss YVONNE ARCHAMBAULT were married in Montreal, Canada, December 26, 1918. Dr. and Mrs. Archambault will reside at 212 State Street, Albany, N. Y.

In Memoriam

STEPHEN J. H. REED, M. D.

Dr. STEPHEN J. H. REED, of the Class of 1907 of the Albany Medical College, died at his home in Fultonville, N. Y., on October 8, 1918.

Dr. Reed was born in Schenectady, N. Y., November 4, 1881, attended the public schools of that city, and graduated from the Union Classical Institute in 1903. He was the marshal of his class in the Albany Medical College and received the senior appointment to the staff of the Ellis Hospital in Schenectady. From February to October, 1908, he was medical interne at the Manhattan State Hospital, Ward's Island, New York City, and from October, 1908 to May, 1909, house physician at the Physicians' Hospital in Schenectady. He then became junior assistant physician at the Hudson River State Hospital at Poughkeepsie, where he remained until May, 1911, resigning to engage in private practice at Fultonville.

Dr. Reed was an ex-president of the Montgomery County Medical Society and had served two terms as coroner of Montgomery County.

Current Medical Literature

REVIEWS AND NOTICES OF BOOKS

Newer Methods of Blood and Urine Chemistry. By R. V. H. GRADWOHL, M. D., and A. J. BLAIVAS. Cloth; 240 pages; with sixty-five illustrations and four color plates. C. V. Mosby Co., 1917, St. Louis.

This book consists of three parts. Part I covers the technique of blood chemistry and includes the compilation of the most common of the methods that are used in blood analysis which have been published in the literature in the last few years. The authors do not claim any originality but have selected the methods from the literature which seem to be the most practical and simple to carry out.

Part II contains the micro-chemical, quantitative methods of urine analysis including also chapters on general urine analysis, microscopic analysis of urinary sediments, staining of bacteria in urine and description of the colorimeter (Hellige).

Part III consists of a discussion of the findings in blood chemical analysis under normal and pathological conditions and their interpretations.

A. K.

ALBANY MEDICAL ANNALS

Original Communications

THE CARE OF THE FLYER.

By WILLIAM E. GAZELEY, M. D

When the problem concerning the cause of the physical ailments peculiar to aviators arose it was at once apparant that the research study of "Mountain Sickness" carried on at Pike's Peak and other mountains would be of the greatest value. Here aviation men spent much time at a given altitude and acclimatization resulted. The aviator ascends to greater altitudes, remaining there but a short time and rapidly descends, so that the compensatory adjustments of the body must afford a temporary maintenance of efficiency in an atmosphere wholly unsuited to it. The pilot who spends but a small part of the day in the air is adjusted only to the level at which he lives. This is shown by the failure to find in any case permanent adaptive changes such as an increase in the percentage of haemoglobin and the number of red blood corpuscles.

Since there is no acclimatization each ascent requires effort on the part of the body, especially of the circulatory system. The frequent repetition of this eventually leads, with a varying degree of rapidity, according to the individual strength, to a condition which has become to be known as air staleness, from its similarity to the overtraining or staleness observed in ath-

letics. All things being equal it would be reasonable to suppose that the aviator could make his highest flight the first time and that each succeeding ascent would with the same margin of safety be lower.

It is readily seen that air staleness must be religiously guarded against, since, unlike athletic staleness, it is the indirect and frequently the direct cause of the death of the aviator: indirect, when in combat his control of the ship is less sure in manoeuvring for a position in the sun or a higher level to gain an advantage over his foe, or he is seized with a strong desire, as frequently occurs, to rush his opponent and "get the thing over with as quickly as possible;" direct, when, as a result of long strain, he faints either at high altitudes or in landing after a rapid descent from great heights, as the result of meeting an abundant oxygen supply after a period of great oxygen deficiency, such as seen in miners coming out of "after damp" and in the older types of submarines on opening the hatches after a submersion.

We do not see fainting as a result of physical exertion as a rule for, long before this, the collection of lactic acid and other waste products in the tissues give warning by a sense of fatigue which leads the individual to rest. The effort in aviation is a circulatory one and no warning is given. Efficiency is maintained until there is a circulatory break and unconsciousness intervenes with the inevitable crash and usual fatality.

The Medical Research Laboratory has endeavored to prevent this mortality by (1) the early classification of men into groups according to their physical condition, as revealed by the rebreathing test so that they will only fly at levels well below their margin of safety; and (2) by the early recognition and treatment of air staleness.

It has been determined that approximately 26,000 feet is the limit at which life can be maintained. Each individual however has his own particular level and could not live above that. The approximate determination of this by the rebreathing test serves as a basis for his classification. As the Henderson

rebreather has been amply described I will only mention that it consists of a tank which is connected to a mouthpiece by inch tubing with light automatic valves. A clip is placed on the nose and the subject inhales air direct from the tank through the inspiratory valve and exhales through the expiratory valve back into the tank through a cartridge containing an absorbent for carbon dioxide. A spirometer compensates for changes in volume and writes a record of the respiratory response on a revolving kymograph. As the aviator rebreathes he gradually reduces the oxygen content to a point where, if the rebreather is not removed, unconsciousness would occur. The pulse and blood pressure are taken at frequent intervals and give a warning of an impending circulatory break. During the test the subject operates several electrical instruments which serve as a basis to judge his mental efficiency throughout and also enable the examiner to recognize the effect of oxygen want on the brain centers.

The "Optimum" type will show as the oxygen is absorbed an increase in depth of respiration, so increasing the ventilation of the lungs. There will be a gradual rise in systolic blood pressure and pulse rate. Inefficiency will result from the effect on the brain and will precede a circulatory break.

The second class will show a more violent blood pressure response. The heart overworks throughout, terminating with a falling diastolic and sometimes systolic and fainting would occur if the apparatus is not removed.

The poorest type gives no response; the blood pressure and pulse show no effort at compensation and inefficiency occurs at a relatively low altitude.

The increase in depth and frequency of respiration is the first compensating factor to appear as sea level is left behind. But the extent of the value of this is soon reached and other factors appear.

It is apparent that if a small amount of well oxygenated blood will sufficiently nourish the tissues, the same needs will be provided for by a greater amount of less oxygenated blood.

Such an increase may result from (1) an increased output per beat, and (2) an increase in the number of beats, or (3) both. Either of these would tend to give an increase in the blood pressure which could embarrass a heart already under strain and lead to an earlier failure. The dilatation of the vessels in response to cerebral stimulation of the vaso-dilator nerves counterbalances this. This interplay in the optimum type occurs so smoothly that no evidence is given of it. The continued decrease in oxygen leads at length to severe embarrassment of the heart muscle with dilatation and death if not relieved.

It is probable that the interplay of the vaso-motor system is first affected by arterio-sclerosis and staleness. High blood pressure occurs in both. As there is evidence that some vessel changes are present as early as thirty it is readily appreciated that youth is essential in aviation. In a series of cases the early twenties showed the largest number of optimum types.

During the rebreathing test sinus arrhythmia is frequently accentuated but has not appeared to alter the run in any degree. Extra systoles when previously present increase during the latter part of the run to great frequency, often occurring every third or fourth beat. Many functional murmurs disappear during the run while organic murmurs increase in intensity.

The summary of the response of the different organs determines the classification of that man; which classification is as follows:

AA—Pursuit pilot, especially resistant to the effect of high altitudes;

A—No restrictions;

B—Should not fly above 15,000 feet;

C—Should not fly above 8,000 feet.

This determines whether the aviator will pilot a pursuit plane a bombing plane or an observation plane.

With each flyer in his proper status the period at which he will become stale is deferred. But close scrutiny must be maintained to detect the early appearance of staleness and measures taken to restore his physical integrity.

Air staleness first manifests itself in changes in the disposition and routine life of the individual. Where once he was

eager to fly at every opportunity he now becomes indifferent, later hangs back and begins to dread going up, but once up he enjoys flying and thinks that he is as skilled and accurate as ever. But he goes into tail spins for unknown reasons and wonders at it; or he has what is called a "series of wind-ups" which merely means a succession of poor landings. In tail spins and other stunts he shows frequently no desire to right the ship and remarks latter what an odd feeling he had had and how he did not seem to care if the ship crashed or not. Usually the complaint of feeling tired all the time is made, or, quite the opposite of a nervous uneasiness and insomnia. The appetite becomes impaired and more rarely nausea and vomiting occur on reaching the ground after a lengthy flight. If such a pilot is examined on the rebreather at this time, his record would be far inferior to his previous one. Severe colds, infections and dissipations all markedly influence a run on the rebreather. Such men are grounded and either given a vacation or put through a course of physical exercises under the care of the physical director, until fit to fly.

The rebreather is a test of the endurance or reserve strength of the circulatory system. It is a functional heart test. In the primary test the men are run only when feeling at their best, for the ability to perform work is a matter of reserve force and there is no doubt this varies from day to day. A cold, a gasro-intestinal disturbance or loss of sleep will influence it.

Reserve force is increased by judicious exercise as is witnessed in the training of men and is decreased by lack of exercise as is well known by those leading sedentary lives.

The aviator then, to be at his best, must be kept in training, in condition, such as is found in a professional baseball team. Here it is much more decisive than that a man is as old as his arteries but his very life depends on the stability and integrity of his circulatory system.

Clinical and Pathological Notes

Bilateral Trauma of the Cortical Leg Centers. By HAROLD N. MOYER, M. D.

A simultaneous injury of the cortical leg centers is of sufficient rarity to justify a report. The accident occurred to a laboring man, strong, and well muscled, 30 years of age. He had always had excellent health and prior to the accident in question had never sustained any serious injury. In the early morning of May 17, 1917, while employed near a pile driver he was struck by a heavy piece of iron weighing about 50 pounds which had fallen a distance of nearly 70 feet. It struck him transversely across the back part of the head, approximately over the posterior portion of the parietal bones. He fell, unconscious. About three hours later he had a slight return of consciousness just as he was being prepared for operation. A portion of the depressed bone was elevated. The brain under the depressed area was not pulsating. Within a few hours after the operation the patient regained his senses and did not lose them again. There was some wandering for a few nights after the operation.

As soon as a fairly complete examination could be made it was ascertained that he had complete paralysis of both legs. At no time was there involvement of the bladder or rectum. At the end of a month there was slight voluntary motion in the left knee and from this on there was a slow improvement until at the end of three months he was able to sit up in a chair. A couple of months later he was so far improved he was able to get about on crutches. Since then there has been practically no gain in locomotion. He can walk two or three blocks but his gait is slow and spastic. He can take a few steps without supporting his weight with crutches.

His present condition is that of a spastic paralysis of both lower extremities, the limitation and weakness being most marked in the right leg. This corresponds to the more extensive involvement of the left motor area, the injury of the skull having been deeper and somewhat farther out on the left side. He walks with a quite characteristic "hemiplegic" gait; that is, there is a tendency to turn the toe inward, most marked in the

right leg. When the foot is brought to the floor there is a slight uncertainty due to an occasional clonus, the heel coming to the floor with a little difficulty. The toes of both feet turn inward, the right the most. There is well marked ankle clonus in both feet which persists indefinitely and has a rate of about 250 jerks per minute. The Babinski sign was not present.

In the right leg there is a loss of feeling up to about the middle of the calf. There is no well marked line of demarcation between this and the area of normal skin perception, but approximately the defect is at right angles around the long axis of the limb. It amounts to only a failure to perceive slight contacts with the skin. Pressure, pain and temperature sense over this area is intact. One is not quite sure that the tactile sense is perfect in the left leg, but it is certainly most impaired in the right.

Other than this spastic paraplegia the man presents no symptoms. He is free from headache; has no dizziness, and his station is not impaired. The eye grounds and pupillary reactions are normal. None of the special senses is altered. He has no headache and is free from any mental disturbance.

The upper extremities are well developed, presenting no changes in sensation or motility. The cremaster and abdominal reflexes are intact.

It is to be regretted that a more accurate localization was not made at the time when the brain was exposed at the operation, but perhaps this would have been impractical. In any event, the injury was sufficiently severe to compromise the motor leg center on each side of the brain. It did not reach as far as the arm centers and apparently on one side only went far enough forward to get the cutaneous distribution of the right leg.

Correspondence

PASTEUR, DOCTOR OF MEDICINE.

36 EAGLE STREET, ALBANY,

January 5, 1919.

DEAR MONT.:

My friend, Dr. Callamand, of St. Mandé, France, has lately sent me some articles written by him. His last letter contains what translates into the following: "I am sending you an article on *Pasteur, Doctor of Medicine*, which deals with realities and which you may translate for Albany's medical periodical."

CULVER.

It has been said, with truth, that Pasteur was not a Doctor of Medicine. He was, in fact, something much better than that: he was medicine itself, the experimental pothogenesis which begets and conditions rational therapeutics.

But he was really, for a time, an M. D. In 1868, at the age of 46 years, he received the diploma from the HERREN PROFESSOREN of the University of Bonn, with this special mention, that: "... by his enlightening experiments, he had been among the foremost to contribute acquaintance with the history of generation of the lower organisms and had greatly advanced the science of fermentation."

When the war of 1870 came, Pasteur, a hemiplegic invalid, sought refuge at Arbois.

As soon as he heard of the bombardment of the Normal School and the Museum, by the barbarians, the 18th of January, 1871, Pasteur hastened to return his diploma to the dean of the faculty of medicine of the Rhenish university, with this stinging letter:

"To-day the sight of this parchment is odious to me, and it is offensive to me to see my name, with the qualification of VIRUM CLARISSIMUM, with which you decorate it, placed under the auspices of a name damned henceforth to the execration of my country, that of REX GULIELMUS.

"Since the interview of Ferrières, France has fought to maintain respect for human dignity; and Prussia has fought to achieve the triumph of the most abominable of lies, namely, that the future peace of Germany must be bought at the price of the

dismemberment of France, while every sensible person knows that THE CONQUEST OF ALSACE AND LORRAINE IS THE STAKE OF A LIMITLESS WAR.

“Written at Arbois (Jura) after reading the stigma of infamy inscribed upon the forehead of your king by the illustrious director of the Museum of Natural History, M. Chevreul.”

Soon after that, Pasteur received this answer from the dean of the faculty of medicine of the University of Bonn, Dr. Maurice Naumann: “Monsieur, the undersigned is directed to answer the insult you have dared to offer to the German nation and to the person of its august emperor, King William of Prussia, and to address to you the expression of *his utmost contempt*.”

“With the purpose of shielding its acts *against pollution*, the faculty returns to you, herewith, your defamatory message.”

Pasteur’s retort was soon forthcoming:

“Sir Dean, the expression of contempt, from the mouth of Prussian subjects, is equivalent, for a heart truly French, to that of VIRUM CLARISSIMUM that you bestowed upon me not long ago, giving the motives for it, in one of your public acts. You talk to me of pollution, Sir Dean. It is, you may be sure, and it will continue to be, even to the most remote future, for the memory of those who began the bombardmen of Paris when capitulation because of famine was inevitable and who have continued that savagery when it had become evident to everybody that it would not hasten by one single hour the surrender of the heroic city.”

That’s all the use Pasteur ever made of his Bosch title of Doctor of Medicine; he showed himself the worthy son of the Sergeant in the wars of Spain and of the Campaign of France, decorated, at the age of 23, by the Legion of Honor, the 12th of March, 1814, at Bar-sur-Aube.

Every chance for approach to or from the Bosches was henceforth dissipated: “Each one of my works, even to the end of my days,” Pasteur wrote to his pupil, Raulin, “shall bear, as its epigraph: HATRED FOR PRUSSIA: VENGEANCE, VENGEANCE.”

It is somewhat here, now—that Nemesis so long awaited.

Dr. CALLAMAND(of St. Mande).

Editorial

Excellent workers in science; tenacious and short-sighted academicians, each wrapped in his specialty! Benedictines of the laboratory who experimented painstakingly and occasionally hit upon something, in spite of enormous blunders given out as truths, because they were their own . . . that was all! And side by side with such patient laboriosity, really worthy of respect—what charlatanism! What great names exploited as a shop sample! How many sages turned into proprietors of sanatoriums! . . . A Herr Professor discovers the cure of tuberculosis, and the tubercular keeps on dying as before. Another labels with a number the invincible remedy for the most unconfessable of diseases, and the genital scourge continues afflicting the world. And all these errors were representing great fortunes, each saving panacea bringing into existence an industrial corporation selling its products at high prices—as though suffering were a privilege of the rich. How different from the bluff Pasteur and other clever men of the inferior races who have given their discoveries to the world without stooping to form monopolies!

VINCENT BLASCO IBANEZ.

The Four Horsemen of the Apocalypse.



High Praise
for Base
Hospital 33.

When the history of Albany's Base Hospital is written the name of Sir William Osler will have a prominent place. The assistance he gave in the recovery of the stray equipment has already been recorded, and his participation in the ceremony of flag-raising gave prompt evidence of his sympathy and encouragement. The only regret is that his remarks on that occasion were not preserved. His own students may accept his cooperation as the expression of his affection for Hopkins men, but Albany physicians will assume a broader sentiment of friendship for a city which he frequently honored, and the advancement of whose medical institutions he was always ready to promote. Either view, however, contributes to the broader conception of Dr. Osler's humanity which grasps every opportunity to benefit his fellows.

It is coming to be known, that, in addition to his semi-official

relations with the unit, Dr. Osler has shown many personal attentions to its members, and has done much to add to the comfort of their stay in England. He modestly justifies this approval of their work, and is not sparing of praise. His friends here may well be gratified at his unqualified commendations, expressed in a personal letter as follows:

"Elting made things hum, at first; and Corning has been an unqualified success as his successor. The clinical and pathological laboratory was one of the very best I have ever seen, and the x-ray outfit was extraordinarily good."

The war is ended and the Albany Unit is being gradually dissipated to the four winds. Its record is now one of history, in which its promoters and administrators will have lasting pride. It is fitting that its career should close with the stamp of success imprinted by the highest medical authority of "Greater Britain," under circumstances in which, to paraphrase his own words, "the American may forget Yorktown; the Englishman, Bunker Hill, and the Frenchman, both Louisbourg and Quebec, on the battlefields of France."

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF DECEMBER, 1918.

Consumption	13	Bright's Disease	16
Typhoid Fever	1	Apoplexy	15
Scarlet Fever	0	Cancer	13
Measles	0	Accidents and Violence	16
Whooping Cough	0	Deaths under 1 year.....	11
Grippe	31	Deaths over 70 years.....	47
Diarrheal Diseases	3	Death rate	20.40
Pneumonia	9	Death rate less non-residents	18.41
Broncho Pneumonia	10		

Deaths in Institutions.

	Non. res.	Res.		Non. res.	Res.
Albany Hospital	4	19	St. Peter's Hospital ...	0	13
Albany Hospital Camp.	0	2	Alms House	0	3
St. Margaret's House ..	2	0	Old Ladies' Home	0	1
Home for Aged	1	1			
Homeopathic Hospital .	8	4		20	51
Hospital for Incûrables.	3	3			
Public Places	1	2	Births		172
Maternity Hospital	1	3	Still Births		5

DIVISION OF COMMUNICABLE DISEASE.

Typhoid Fever	9	Tuberculosis	23
Scarlet Fever	1	Pneumonia	56
Diphtheria and Croup	4	Mumps	11
Chickenpox	16	Influenza	436
Smallpox	0	Septic Sore Throat	17
German Measles	0		
Measles	1	Total	589
Whooping-cough	15		

Number of days quarantine for scarlet fever:

Longest..... 34 Shortest..... 34 Average 34

Number of days quarantine for diphtheria:

Longest..... 137 Shortest..... 18 Average..... 56 1/6

Fumigations:

Rooms..... 188 Buildings..... 25

Milk bottles disinfected 177

Communicable Disease in Relation to Schools.

None.

NURSE'S REPORT.

Tuberculosis.

Living cases on record December 1, 1918..... 887

Cases reported:

By card 19

Dead cases by certificate 4 23

910

Dead cases previously reported..... 9

Dead cases not previously reported..... 4

Removed 4 17

Living cases on record January 1, 1919..... 893

PUBLIC HEALTH

49

Total tuberculosis death certificates.....	13
Non-resident deaths	0
Resident deaths	13
Visits to cases of tuberculosis.....	62
Miscellaneous visits	12

LABORATORY REPORT.

Diphtheria.

Initial Positive	9	Unsatisfactory	11
Initial Negative	234		
Release Positive	4	Total	300
Release Negative	42		

Sputum for Tuberculosis.

Positive	36		
Negative	146	Total	186
Doubtful	4		

Widals.

Positive	4		
Negative	4	Total	11
Unsatisfactory	3		

Miscellaneous.

Wassermann tests	80	Pathological Examinations .	3
Milk analyses	100	Miscellaneous	1

Division of Sanitation.

Complaints	48	Reinspections	31
Inspections	44	Plumbing	7
Plumbing	2	Sanitary	24
Sanitary	42		

HEARINGS.

Hearings	0
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DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections	66	Blue or red	6
Old Houses	59	Peppermint	1
New Houses	7	Houses examined	22
Permits issued	60	Re-examined	62
Plumbing	59	Valid	18
Building	1	Without cause	4
Houses tested	7		

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	13	Cats removed	63
Dogs removed	46		
Total			122

DIVISION OF MARKETS AND MILK.

Public market inspections...	22	Fat tests	52
Milk depots inspected.....	24	Sediment tests	34
Stores inspected	65	Chemical tests	52
Milk cans inspected.....	369	Cows examined	85
Dairies inspected	10	Cows quarantined	3
Milk houses inspected.....	10	Complaints investigated	6
Lactometer readings	86	Special investigations	6
Temperature readings	86	Poultry condemned lbs.	12

MISCELLANEOUS.

Cards posted for communi- cable disease	6	Vaccination dressings	67
Cards removed	8	Employment certificates is- sued to children.....	29
Notices served on schools...	65	Garbage collected from 1st District	204
Notices served on stores and factories	5	Garbage collected from 2d District	177
Postal card returns sent to doctors	6	Garbage collected from 3d District	211
Postal card returns received from doctors	8	Cases assigned to health physicians	51
Inspections and reinspections	6	Calls made	112
Vaccinations	42		

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—STATISTICS FOR DECEMBER, 1918.—Number of new cases during month, 161; classified as follows: Dispensary patients receiving home care, 2; district cases reported by health physicians, charity cases reported by other physicians, 52; moderate income patients, 46; metropolitan patients, 63; old cases still under treatment, 86; total number of cases under nursing care during month, 247. Classifications of diseases for the new cases: Medical, 101; surgical, 10; gynecological, 0; obstetrical under professional care, 53; mothers, 35; infants, 35; pre-natal, 18; eye and ear, 18; skin, 4; throat and nose, 53; dental, 0; infectious diseases in the medical list, 68; infectious diseases in the surgical list, 0. Disposition: Removed to hospitals, 5; deaths, 7; discharged cured, 53; discharged improved, 40; discharged unimproved, 7; number of patients still remaining under care, 49.

Special Obstetrical Department.—Number of obstetricians in charge of

cases, 2; number of students in attendance, 0; number of nurses in attendance, 1; number of patients carried over from last month, 0; number of new patients during month, 0; number of patients discharged, 0; number of visits by head obstetrician, 0; number of visits by the attending obstetrician, 0; number of visits by students, 0; number of visits by nurses, 0; total number of visits for this department, 3 cases.

Visits of Nurses (all departments).—Number of visits with nursing treatment, 604; for professional supervision of convalescents, 130; total number of visits, 1,049; cases reported to the Guild by health physicians, and other physicians, 38 graduate nurses, 18 pupil nurses on duty. Reported by: Family, 33; neighbors, 10; home service, 7; ass'd char., 1; dispensary, 2.

Dispensary Report.—Number of clinics held, 70; number of new patients, 99; number of old patients, 371; total number of patients treated during month, 470. Classification of clinics held: Surgical, 6—22 patients; nose and throat, 9—44 patients; eye and ear, 17—197 patients; skin and genito-urinary, 7—49 patients; medical, 7—48 patients; lung, 7—33 patients; dental, 1—4 patients; nervous, 3—18 patients; stomach, 0; children, 8—32 patients; gynecological, 7—9 patients.

THE MEDICAL REVIEW OF REVIEWS, which has recently purchased the *Buffalo Medical Journal*, and which was consolidated with their publication in January, announces the purchase of *The Southern Practitioner*, which will also be consolidated with the *Review* next month. This is the fourth Journal which the *Medical Review of Reviews* has purchased and consolidated under its present management.

FOR BETTER RURAL HEALTH.—Much remains to be done in rural districts, according to the annual report of the Secretary of Agriculture, to control such pests as mosquitoes and the hookworm, to eliminate the sources of typhoid fever, and, even more, to give the country districts the advantage of modern hospitals, nursing and specialized medical practice.

Noting that many agencies, some of them private enterprises with large funds, are working for improvement, the report says that the Department of Agriculture, through its home demonstration service, is giving valuable aid, and the public health service is increasingly extending its functions.

To what extent the further projection of effort is a matter for State or local action remains to be determined, but it seems clear that there should be no cessation of activities until there has been completed in every rural community of the Union an effective sanitary service and, through the provision of adequate machinery, steps taken to control and eliminate the sources of disease and to provide the necessary modern medical and dental facilities, easily accessible to the mass of the people.

IMPROVING CITY MILK SUPPLIES.—Sanitary milk control, an important factor in city welfare and a big problem of the city health department, receives personal attention from the Dairy Division of the United States Department of Agriculture. Specialists in sanitary production and handling of milk are usually available, and upon request of the city health departments they are sent to assist in improving the milk supply. This assistance may mean the making of a general survey lasting only a few days or a very intensive inspection lasting two or three months.

During the last year personal aid was given to thirty-six cities in fourteen States. In addition to this, assistance was given the United States Public Health Service by conducting sanitary milk surveys and in improving the milk supply of fifteen extra cantonment zones.

All phases of city milk supply are covered. Inspection of dairies, milk plants, and other distributing centers are made; samples of the products are taken and analyzed both chemically and bacteriologically. When necessary, help is given in the installation of laboratories and technique and in the interpretation of the results of chemical and bacterial analyses.

Special meetings may be held among both producers and consumers of milk in order to arouse interest in the local milk supply. Advice in framing ordinances to cover dairy and milk conditions is also offered.

An important feature is the milk contest work, in which specialists assist in instituting these contests and act as judges in scoring the product to determine the relative standing of milk producers. These contests encourage rivalry among dairymen and, in consequence, tend to improve the milk supply of a city.

A PROGRAM FOR MENTAL HYGIENE.—Any program of the United States Public Health Service for Mental Hygiene should take into consideration:

A—The most effective means by which the several government agencies can operate in studies and investigations of mental hygiene.

B—The problems of better care and treatment of the insane and mental defective.

C—Measures for the prevention of mental disorders

The results of the studies and investigations already made by the Public Health Service indicate the desirability of continuing the activities of the service on a broader scale as outlined in the following program:

A—Cooperation with Other Government Agencies.

1. In addition to the duties prescribed by law as related to the mental (a) to establish a school for the training of medical officers as mental hygienists, (b) to provide facilities for training nurses and assistants for duty in mental hygiene work, and (c) to investigate the care and treatment of insane aliens, confined under immigration laws in public and private institutions at Government expense.

2. Cooperation with other bureaus of the Treasury Department in the mental examination of coastwise pilots, locomotive engineers and train dispatchers as a safeguard to the traveling public.

3. Cooperation with other departments or bureaus of the Government to devise practical methods for the mental examination of civil employees of the Government with a view to determine their fitness for different occupations.

4. Cooperation with the Department of Interior in the study and prevention of insanity and mental deficiency among the wards of the Government, such as the Indians, Esquimaux and other primitive races for whom the Government is responsible.

5. Cooperation with the Bureau of Education in the revision of educational methods from the standpoint of mental hygiene.

6. Cooperation with the Bureau of Education in devising practical plans for the establishment of special classes for the training of feeble-minded and delinquent children.

7. Cooperation with State Departments of Justice and other agencies to secure (a) the adoption of a model law providing for the early treatment of mental disorders, (b) the enactment of a uniform commitment law, and (c) the establishment of psychiatric pavilions in general hospitals.

8. Cooperation with Federal and State Departments of Justice to secure the establishment of psychiatric clinics in connection with the courts to determine the mental status of criminals, dependents and delinquents appearing before the court.

B—Care and Treatment.

1. Studies and investigations of methods of administration, maintenance, medical care, classification and after-treatment of the insane, epileptic, feeble-minded, criminal and dependent confined in institutions.

2. Investigations with a view to devising a desirable method of parole of the insane and feeble-minded, criminal and delinquent classes.

C—Prevention.

1. Cooperation with State and local agencies to secure the adoption of a law making mental disorders reportable to the health department.

2. Reviewing and publishing State laws of commitment of the insane and feeble-minded.

3. Cooperation with the State and other agencies to determine the prevalence of the insane, feeble-minded, alcoholics and epileptics.

4. Investigating the prevalence and the care and treatment of the insane, epileptic, feeble-minded, criminal and dependent classes confined in institutions in Alaska and in the insular possessions.

5. Compiling a national reference index of the literature on mental hygiene.

6. Investigating mental status in relation to certain constitutional diseases and drug addiction.

7. Cooperation with the industrial hygiene unit of the U. S. Public Health Service in the studies and investigations of the mental status of

workmen as related to output, fitness for the job, protection from health and injury hazards, and permanence of employment.

8. Cooperation with the child hygiene unit of the service in the study and investigation of insanity in children and of the personality of the potentially insane.

9. Cooperation with the Division of Venereal Diseases in studies and investigations of the mental status of prostitutes and of the relation of venereal diseases to mental disorders.

COLD-PACK CANNING AND BOTULISM.—The United States Department of Agriculture authorizes the following statement:

Botulism, often called sausage poisoning, is a specific intoxication brought about by *Bacillus botulinus*, an organism isolated by Van Ermen- gen from insufficiently cooked sausages which had caused a severe out- break of food poisoning in Belgium in 1895. The symptoms (nausea, gastric pains, visual disturbances, muscular weakness, etc.) are caused by a definite toxin or poison produced by the *Bacillus botulinus* outside of the body.

The *Bacillus botulinus* is an anaerobic organism—that is, it grows in the absence of air. It grows readily at 20 to 25 degrees centigrade, but only sparingly at 37 degrees centigrade, the temperature of the body, and there is no conclusive evidence that it produces its toxin to any extent in the digestive tract of animals. *Bacillus botulinus* does grow readily and produces its toxin in protein foods such as meat or fish products. Some investigators state that it also produces its toxin readily in protein-con- taining vegetables like peas, beans and corn. When growing in these foods, the organism produces a very powerful poison which produces the symp- toms mentioned above, or even death, when eaten in extremely small amounts. Fortunately, cases of botulism are not common in this country.

The *Bacillus botulinus* is a spore-forming organism, but both the organ- ism and its spores are not very resistant to heat, the spores being killed by heating to 80 degrees centigrade for one hour. The toxin which the organ- ism produces is also destroyed by boiling. Thorough cooking at the boiling temperature is therefore all that is necessary to kill the organism and destroy its toxin in the food, and cases of botulism are due to the eating of food which has been infected with the organism and not been sufficiently cooked. Sausages, which might become infected with this organism, present ideal conditions for its growth, and have been a frequent cause of botulism. From this fact the name of the disease is derived. Infected meat products and, in a few instances, canned vegetables and fruits have been given as causes of botulism.

Recently Dr. Dickson of San Francisco has reported* a study of eleven outbreaks of food poisoning, occurring during the past eighteen years in California, which he attributes to eating canned vegetables and fruits. In these cases no definite information is available as to the methods used in canning the vegetables, but it is reasonable to assume that the contami-

nation of the goods might have been brought about by the selection of food of poor quality for canning, by lack of cleanliness in packing the products, by the neglect of some essential steps in the process, or by failure of the heat to penetrate to all parts of the can in sterilization.

There is no danger that the type of food poisoning known as "Botulism" will result from eating fruits or vegetables which have been canned by any of the methods recommended by the United States Department of Agriculture, providing that such directions have been followed carefully, and that no canned goods are eaten which show signs of spoilage. In case of any doubt as to whether the contents of a particular can have spoiled it should be thrown away. If fed to chickens or other animals it should be boiled. No canned food of any kind which shows any signs of spoilage should ever be eaten. In the cold-pack method of canning given out by the Department of Agriculture, only fresh vegetables are recommended for canning, and sterilization is accomplished by the following processes: Cleansing, blanching, cold-dipping, packing in clean, hot jars, adding boiling water, sealing immediately, and then sterilizing the sealed jars at a minimum temperature of 212 degrees Fahrenheit for one to four hours, according to the character of the material. Since the spores of *Bacillus botulinus* are killed by heating for one hour at 175 degrees Fahrenheit there is no reason to believe that the *botulinus* organism will survive such treatment.

The *Bacillus botulinus* has been found in the digestive tracts of some animals, especially the pig and the fowl, probably occurring there in the same manner as does the organism of tetanus (lock-jaw) in the intestinal tract of the horse. It is not a parasite in the ordinary sense, but rather a saprophyte. From these sources it may be deposited on the soil although attempts at isolating it from the soil have generally given negative results.

PERSONAL.—Dr. MEYER L. RHEIN (A. M. C., '80), figures prominently in Dr. Arthur N. Davis' timely book, "The Kaiser as I Knew Him," and has become, unwittingly, the agent of an analysis of the Kaiser's character of world-wide interest. Dr. Davis explains the accident of his intimacy with the Kaiser as follows:

"During my first vacation while at college I went to New York to get more practical experience in dentistry, and became assistant to Dr. M. L. Rhein; it was through this connection that the opportunity to practice abroad subsequently came to me.

"I graduated from college in 1902 and established myself in Chicago. About a year and a half later I received an invitation from Dr. Rhein to go to New York to meet Dr. Alonzo H. Sylvester, an American dentist practicing in Berlin, who numbered the Kaiser among his patients. He had come to America to select an associate because his failing health made it impossible for him to give to his practice the attention it demanded."

DIED.—Dr. CHARLES B. TEFFT (A. M. C., '64), of Utica, N. Y., died October 31, 1918.

—Dr. FRANK TOWNSEND STANNARD (A. M. C., '88), of Troy, N. Y., died October 29, 1918.

—Dr. WILLIAM F. RAFFERTY (A. M. C., '11), died at his home in Rensselaer, N. Y., January 15, 1919.

—Dr. WESLEY M. ADAMS (A. M. C., '13), of Schenectady, N. Y., died October 15, 1918.

—Dr. ISAAC H. LENT (A. M. C., '13), of Middletown, N. Y., died about October 20, 1918.

—★Dr. MATTHEW OLSTEIN (A. M. C., '16), of Peekskill, N. Y., died of wounds on October 1, 1918. Dr. Olstein, ranking as lieutenant, was one of the officers attached to the 314th Infantry, to which he had been transferred from the Upton Division. He was twenty-four years of age, and before entering the service was a member of the staffs of the Metropolitan and Lying-in Hospitals of New York City.

Current Medical Literature

MEDICINE

Post-Malarial Severe Anaemia.

A. W. HARRINGTON, Captain, R. A. M. C. (T. F.), and W. WHITELAW, Ch. B., Captain, R. A. M. C. (T. F.). *Glasgow Medical Journal*, No. 51. June, 1918.

Shortly after our arrival in Macedonia we were impressed by the occurrence after malaria of cases of grave anaemia, apparently of the pernicious type. It was found possible to examine eighty cases, involving one hundred and twenty-one full blood counts, and complete physical examinations.

With the exception of a few Bulgar and German prisoners, the patients were all Serbian soldiers. For the differential results, five hundred cells were counted.

I. *Severe forms.*—1. Post-malarial anaemia may assume a grave type characterized by all the signs and symptoms of pernicious anaemia but without evidence of oral or intestinal sepsis.

2. The spleen is enlarged, sometimes considerably so, but the liver is seldom enlarged.

3. The blood shows marked diminution of red corpuscles, high color index, leucopaenia with a relative increase of lymphocytes and to a lesser extent of large mononuclears, poikilocytosis, megalocytosis, polychromasia, occasional granular basophilia, the presence of megaloblasts and

normoblasts, and a small percentage of myelocytes frequently, and myeloblasts constantly.

4. Such cases occur most frequently as a sequel of subtertian malaria, but may follow benign tertian.

5. Recovery usually follows prompt and energetic treatment, but death may occur, and the gravity of the prognosis increases with the age of the patient.

6. Treatment by arsenic used as in pernicious anaemia, either as liquor arsenicalis in increasing doses, or galyol or kharsivan intravenously, usually leads to recovery. It should be combined with treatment by quinine, orally or intramuscularly as indicated.

II. *Mild forms*.—1. The blood shows a less marked diminution of red corpuscles, a low color index except in a few more recent cases, a less marked leucopænia with a relative increase of lymphocytes, and large mononuclear cells, slight poikilocytosis, occasional megalocytes and polychromasia, rarely granular basophilia, the presence of normoblasts and rarely of megaloblasts, and a small percentage of myelocytes frequently, and of myeloblasts constantly.

2. The average age of the patients is lower.

3. Recovery is the rule.

A Study of the Neutralization Properties of Antipoliomyelitic Horse Serum.

JOHN W. NUZUM. *Journal of Infectious Diseases*, Vol. 23, No. 3, September, 1918.

Antipoliomyelitic horse serum, prepared by repeated intravenous injections of the coccus isolated from the central nervous system in human and monkey poliomyelitis possesses neutralizing properties against the virus of poliomyelitis.

Immune horse serum protected 11 monkeys perfectly against fatal doses of virus. In 2 monkeys in which both immune human serum and immune horse serum failed to neutralize the virus, a definite delay of 16 days in the onset of paralysis must be attributed to the immune horse serum as compared to a shorter delay of 11 days with immune human serum known to possess much neutralizing principles.

The neutralizing properties of antipoliomyelitic horse serum in vitro for the virus of poliomyelitis afford a convenient and satisfactory test of the potency of this serum for use in the treatment of poliomyelitis. Suitable controls with normal horse serum and comparisons with immune human serum known to possess neutralizing properties should be conducted simultaneously.

Finally, the neutralizing, protective and curative properties of antipoliomyelitic horse serum for experimental poliomyelitis of monkeys are in direct accord with the favorable results observed in the serum treatment of human poliomyelitis and argue strongly for the etiologic relationship of the coccus to this disease.

The New Treatment for Paralysis Agitans.

WALTER B. SWIFT. *Boston Medical and Surgical Journal*, Vol. CLXXIX, No. 21, page 644, November 21, 1918.

The author cites briefly the treatment of three typical cases of a method which consists solely in the muscular movements of a simple nature, gone through very slowly, at the rate of about one foot to the second, with strong mental concentration upon the movement while it is in progress. First come movements of the right foot, then of the left, then of the legs successively, then of the right and left arms in order, then of both arms, and finally of the hands and fingers. The object is not muscular development but rather development of nervous control over the muscles. The movements should be regular and they should be definitely prescribed, but it is not necessary to outline any special form for them in this place because they can easily be invented by anyone. No particular value need be attached to any special set of exercises, because the nervous control is the same in one as in another.

It seems likely that the essence of the entire treatment lies in this slowness of movement, and perhaps also in the mental concentration which should accompany the movement.

The purpose of these exercises is to develop just this feeling of pervading steadiness to such a pitch that it endures as a constant feature of the patient's physical life. By the writer's experience with them and by observation of patient's use of them he is led to believe that these exercises do build up a *central inhibitory control*.

A Clinical Report of Nonspecific Protein Therapy in the Treatment of Arthritis.

SNYDER. *Archives of Internal Medicine*, August, 1918.

In his series of 110 cases, the author used typhoid vaccine prepared by the laboratories of the New York Board of Health, indicating however that any protein (bacterial, animal or vegetable) may be used.

In acute arthritis about sixty per cent of cases responded by an abrupt termination after one injection (intravenously). After repeated injections in subacute cases marked improvement followed in about fifty per cent and moderate improvement in another twenty-five per cent. While in chronic cases (one to ten years' duration) "moderate improvement in mobility of some joints was noted in almost all cases."

Experimental Meningococcus Meningitis.

CHARLES R. AUSTRIAN. *Bulletin of the Johns Hopkins Hospital*, Volume XXIX, No. 330.

Owing to the circumstances under which research was carried out monkeys were not available. Rabbits were used. Cultures of meningo-

cocci which were introduced into the spinal canal in the lumbo sacral region produced a rapidly fatal inflammatory reaction most marked at the base of the brain. In certain instances, positive cultures were obtained from the nasal mucous membrane. In only two of ten animals did invasion of the blood stream occur.

In a new series of twenty rabbits, suspension of meningococci were injected into the nasal mucous membrane. None of these animals developed meningitis. Two developed positive blood cultures. This may have been due to the direct injection into the small blood vessel.

In another series of fifteen rabbits similar suspension was injected into the ear vein. Meningococci disappeared from peripheral circulation within an hour and a quarter and none of the animals developed meningitis.

However, hyperemia of the choroid plexus and of the meningeal vessels was produced by preliminary irritation of the meninges produced by injections of normal rabbit serum and from thirty to fifty minutes later the animal was given an injection of standard suspension of the meningococci into the ear vein. In two animals of twenty so treated, killed one hour after injection, meningococcus was found in smears and was obtained from the spinal canal, in one, in pure culture. Three other animals developed typical fatal meningitis.

From the above, the author believes it is demonstrated that meningococcal sepsis in the rabbit may lead to the development of a metastatic meningitis when there is a pre-existent hyperemia of the meninges.

Peptic Ulcer with Special Reference to Roentgen-Ray Diagnosis.

F. H. BAETJER and JULIUS FRIEDENWALD. *Bulletin of The Johns Hopkins Hospital Volume XXIX, No. 330.*

An additional series of 743 cases of peptic ulcer has been followed not only clinically but by careful X-ray study. In 185 cases, the diagnosis was definitely proven by operation. In 323, clinical symptoms as well as positive X-ray indicated that the diagnosis was undoubtedly correct. 235 cases lacked some immediate signs although in a large number the X-ray findings were definite.

From this study the authors conclude:

"1. The X-ray offers most valuable assistance to the diagnosis of peptic ulcer, and although this method is not yet sufficiently well developed to be relied upon alone without entering into the clinical aspects of the disease, it is of the greatest diagnostic help in obscure cases.

"Positive X-ray findings are noted in about 84 per cent of cases of peptic ulcers and in 79 per cent of cases operated upon.

"2. In duodenal ulcer there is excessive hypermotility of the stomach with rapid evacuation of the contents, so that the greater portion is extruded within the first half hour; there is hypermotility of the duodenum

with formation, usually, of a deformity which remains fixed in all of the examinations.

"3. The diagnosis of gastric ulcer is dependent upon two conditions, namely, the functioning of the stomach, and the finding of the filling defect. It is only when the filling defect is situated along the anterior surface of the stomach and along the anterior surface of the lesser and greater curvatures that it can be demonstrated. On the other hand, it matters not what the situation of the ulcer is, the functions of the stomach are materially affected. We have in this condition an excessive irritation from the ulcer, with consequent hypermotility and a spastic condition of the pylorus, so that for the time being there is practically no expulsion of bismuth. It is only when the spasticity relaxes that a portion of the bismuth is expelled. In gastric ulcer, wherever its situation, we can always look for a certain amount of retention of contents. There is always a more or less marked hour-glass formation. According to our observations the functional signs are often as important as the presence of the filling defect in arriving at definite conclusions, inasmuch as in 8 per cent of our cases, although there were no defects found, the functional changes pointed definitely to ulcer.

"4. The greatest difficulties arise in the diagnosis of complicated cases; that is, when adhesions are present. These so frequently mask the usual findings that it is often impossible to determine whether there is really an ulcer of the stomach at hand or a lesion of some other organ. When the ulcer is situated at or near the pylorus, signs of partial obstruction frequently aid in establishing the diagnosis.

"5. The X-ray affords an almost absolute means of differentiating between gastric and duodenal ulcer.

"6. By means of the X-ray examination we can generally rule out the presence of ulcer.

"7. We can approximately determine the degree of healing as well as recurrence of an ulcer which cannot be as certainly determined in any other way.

"8. One can obtain sufficient evidence as to the extent and induration of the ulcer and degree of obstruction to guide us, in a measure, as to the necessity of surgical intervention."

A Clinical Study of 400 Patients with Bronchial Asthma.

I. C. WALKER. *Boston Medical and Surgical Journal*, August 29, 1918.

All patients were tested by the skin or cutaneous method for sensitization to the proteins of animal hair or dandruff, food, bacteria and pollens. 48% gave a positive skin test, the criterion for a positive test being an urticarial wheal measuring at least 0.5 cm. "75% of the patients who began to have asthma during infancy (under the age of two) were sensitive; between the ages of 2 and 15, 66% were positive; be-

tween the ages of 15 and 35, 52% were positive; between the ages of 35 and 50, 23% were sensitive; and none were sensitive when the age of onset was after 50."

Walker shows that sensitization to the protein in animal hair (horse, dog, cat, wool), was most marked under 10 years of age (45 out of 75 sensitive cases) and that succeeding ages show a gradual decrease in number thus sensitive.

Sensitization to food proteins apparently is much more common in infants. Of all food cases one-half were sensitive to cereals, wheat being the chief offender; next to wheat ranks the egg, while fish, potato and casein are close thirds.

In the case of pollen proteins timothy and ragwood hold chief place among the early and late pollens, respectively; while, in the author's findings, sensitization to rose, red top, daisy and golden rod was infrequent.

All ages up to 40 showed about the same frequency of sensitization to bacterial proteins, more being sensitive to *Staph. pyog. aureus*.

As to treatment, the author says: "If a patient is sensitive to food proteins, such food should be omitted from the patient's diet for at least a month. In this series of cases nearly all such patients have been relieved of asthma. Attempts to desensitize the patient against offending food protein by the subcutaneous injection of or by feeding gradually increasing amounts of the protein have failed. We have reasons for believing that total abstinence from the offending protein for a long interval automatically desensitizes the patient for that protein.

"Patients who are sensitive to bacterial proteins may be successfully desensitized against such by treatment with vaccines of those organisms.

"Patients who are sensitive to pollen proteins should be treated in anticipation of the season."

The Clinical Significance of the Abnormally Wide Ventricular Deviation in the Electrocardiogram.

S. NEUHOF. *Archives of Internal Medicine*, July, 1918.

The author has noticed in cases of myocardial disease (hypertension, aortitis, precordial distress, decompensation) that electrocardiographic tracings show an abnormal width of deviation of the R wave of the ventricular complex. Taking 0.07 of a second as the lower limit of abnormal he shows that all of his tracings with abnormally wide R was presented unmistakable signs of myocarditis. "It had no relation to the height of the R wave, pulse rapidity, cardiac rhythm or to the underlying disease producing the myocarditis. In some of the cases severe decom-

pensation was present; in others, absent. Though no definite statement of the fundamental cause of the abnormally long duration of the R phase can be offered; its frequent association with myocarditis would make it appear possible that this lesion acted as a direct hindrance to the proper, normal, rapid prolongation of the wave of electrical excitation through the ventricular musculature."

Studies on Renal Function During and Immediately Following Some of the Acute Infectious Diseases.

FROTHINGHAM. *Archives of Internal Medicine*, July, 1918.

Cases selected for this study were among young people who presented no urinary evidence of chronic or acute nephritis. The series included six cases of typhoid fever all on high caloric diet, four cases of pneumonia Group I (Cole), six cases of pneumonia Group IV (Cole), five cases of acute articular rheumatism and six miscellaneous cases (diphtheria, gonorrhoeal arthritis, periosteal abscess, acute gout.)

Renal function was studied during and just after the infection by (a) phenolsulphonephthalein test, (b) the estimation of blood urea (c) and the determination of McLean's index of urea excretion.

The author concludes: "From these studies it may be concluded that these tests for renal function, namely, the phenolsulphonephthalein elimination, the urea nitrogen in the blood, and the index of urea elimination, failed to show consistent evidence of impaired renal function during the course of or following these acute infections in which the clinical picture or the urinary examination by the older methods showed nothing suggestive of acute nephritis."

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Edited by Frances K. Ray

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ALBANY MEDICAL ANNALS

Original Communications

A CASE OF TRAUMATIC EPILEPSY.

From the Mental and Surgical Services of the Albany Hospital.

By J. MONTGOMERY MOSHER, M. D.

This case is reported because of the typical symptoms pointing to a localized cortical lesion, the availability of the latter for surgical interference, its removal by operation, and the recrudescence of the disease arising from the connective tissue proliferation incident upon the process of healing.

CASE 3599, PAVILION F RECORDS, ALBANY HOSPITAL.

The patient was a muscular, well developed boy, who was brought to the hospital by his mother on January 7, 1916, because of a mental condition which rendered him unmanageable at home. He was born October 22, 1905, with a history of tuberculosis in his father's family. His father had died of tubercular meningitis at fifty-two. On the mother's side the antecedents were good. There had been no other children. He was a frail baby, but after a few weeks improved, and with the exception of an attack of acute lymph-adenitis, which lasted about a week, had always been healthy and rugged.

In October, 1910, he fell about six feet and was found dazed. No after-effect was noted. In January, 1913, he fell again about ten feet. Both falls were purely accidental. After the second

fall he lay a few seconds, and there appeared no immediate effects. He did not complain of pain in the head. On the day following the second fall, while standing near the dining table, he suddenly appeared dazed and said to an aunt, "Why, where are you? It is all black and I cannot see you." Six months later while talking he suddenly stopped. His mother approached him, noticed that he was "lost," and after a few seconds he said he "had been somewhere." In September, 1913, while standing near the telephone switchboard at which his mother was employed, he again suddenly stopped talking. After that the attacks occurred sometimes as often as three times a day. In school he would stop reading, and then begin again after a pause, but after a short time he was able to pick up the reading where he left it.

He was given bromide and had some relief during the following year. During this period he had occasional attacks, characterized by turning his head and eyes to the left, but there was no spasm of any kind. On one occasion he left his desk and went into a class of which he was not a member.

For the three months preceding his admission to the hospital he had none of these attacks. In November, 1915, he became irritable and profane, and had mental seizures in which he seemed to wish to kill himself, and on several occasions asked for a gun to kill some children who had annoyed him; he carried a toy pistol for self-defense. These attacks began suddenly, and sometimes lasted for half a day. His appetite failed, he was unable to maintain himself in his studies, and it was particularly noticed that he made peculiar errors in spelling and reading. He did not understand what he read, but seemed to comprehend when he was told. He spelled his name "J-h-o-n-s-o-n," invariably displacing the "h," although he had previously known how to spell it. He also lost his ability to write. His sleep was irregular and often restless, but he manifested no excitement and was not known to have attacks during the night.

The above history as given by the mother does not vary essentially from that given by her to Dr. Hun, whom she consulted on March 24, 1915. At that time it was stated that the attacks of petit mal began in October, 1913, and during the ensuing eigh-

teen months, had been repeated from twenty-five to thirty-five times. In some attacks his head was drawn so strongly to the left that he called to his mother for assistance, and did not become unconscious. In the attacks of petit mal he lost consciousness for a few seconds, and there had been only one major attack so far as known. There had been no local spasm beyond the deviation from the head to the left. The physical examination at that time was negative. Dr. Hun advised operation.

For three days after admission to the hospital the boy was drowsy and inactive, and there was difficulty in arousing him. On the 10th of January some peculiar manifestations were noticed, and the nurses stated that "he seemed to follow something along the wall." On the following day he had two slight epileptiform convulsions which lasted four or five minutes. On the 12th there were three attacks of ambiguous character, and it was noticed that his head and eyes were turned to the left. The attacks had apparently been controlled by bromide, for at this time they became very frequent, and on the 14th about twelve seizures were noted, varying in character from petit mal to major attacks, and often in the spasmodic condition with rotation of the head and eyes to the left. On the 15th I was fortunate in seeing a more typical and illuminating seizure than any that had been reported. The boy was brought to my office by his mother, and while sitting quietly awaiting consultation the attack began. His head and eyes turned slowly to the left and became fixed in extreme left lateral rotation with the lids closed. The left upper extremity was elevated slightly in position of adduction and semiflexion of the forearm, without marked rigidity. Toward the end of the attack there was a deep respiration, the head relaxed in moderate clonic spasm, and the boy suddenly awoke. The clonic stage did not affect the extremity. There was no involvement of the lower extremity or of the opposite limbs. There was a suggestion of coma during the clonic stage, but there was no coma after the spasm subsided, and the patient became normal and active at once. The boy returned to the hospital, and the mother reported that during their absence of four hours he had had nine seizures. The Jacksonian and other attacks became more and more frequent until the operation.

The frequency and character of the attacks are indicated in the following extracts from the nurses' notes:

January 7. 6 P. M. Got up to walk, but instead of walking straight ahead, he turned around and around.

January 8. 3 to 6 A. M. Sits up in bed and looks around but still in sound sleep.

12 P. M. Asleep with eyes open and face twitches.

January 10. 1 P. M. Seemed to follow something along the wall; did not feel when hand was pinched.

January 11. 10 A. M. Attack like an epileptic fit: twitched and jerked all over; voided in his clothes; yawned when coming out of it; lasted four or five minutes.

11 A. M. Walks peculiarly on toes; drags feet.

3 P. M. Unconscious for a few seconds.

6 P. M. Walked around and around to his left with head turned over left shoulder.

9.30 P. M. Head turned to left; body stiff; unconscious; twitching.

10 P. M. Stood in middle of floor with head turned over left shoulder, and turned around and around for two minutes.

January 12. 6 A. M. Shook hard, attempted to bite tongue; cried, said he could not get his breath and was dizzy.

12 M. Fell to floor.

9 P. M. Dropped to floor; stiff; with head and eyes turned to side; three minutes.

January 13. Three attacks with rotation of head and eyes to left.

January 14. Eleven attacks of brief duration with rotation.

January 15. 4 A. M. A severe attack, lasting ten minutes; cried, said he was scared and dizzy; could not sit up; staggered, almost to falling. Fifteen other attacks.

January 16. 4 A. M. Attack—made strange noise; shook hard; cried at top of voice; could not walk alone; followed by very ugly mood.

8 A. M. Head turned to right(?); eyes closed tight; shook; muscles rigid; mouth open, with grunting noise; both arms bent at elbow and fists clenched; face flushed, white about nose; hands blue and cold; followed by difficulty in breathing.

Twenty-one other attacks during the day, several severe and many light.

January 17. Nineteen minor attacks.

January 18. 4 A. M. A major attack.

11 A. M. To operating room.

Dr. Elting kindly gives the following description of the operation:

At the operation on January 18th, 1916, an extensive osteoplastic resection of the right side of the skull was done. The dura appeared to be normal on its exterior surface as did the inner surface of the bone flap. On palpation, however, the dura seemed abnormally tense as though there was increased intracranial pressure. The dura was freely incised when it was found that very extensive old adhesions existed between the dura and pia. In some places these adhesions were very dense and tough so that some of the larger cortical veins were torn in the process of loosening the adhesions, requiring several sutures. The area of adhesions was roughly about eight centimetres in its diameters and covered practically the entire motor area of the cortex. The adhesions were carefully loosened over the entire adherent area and it was found that beyond this area there were no adhesions and no evidence of any abnormality. The cortex was carefully palpated but no evidence of any other cortical or subcortical disturbance could be found other than the adhesions. No attempt was made to suture the dura, which would have been quite impossible owing to the increase of intracranial pressure. The osteoplastic flap was replaced and the wound was carefully closed without drainage. There was a moderate amount of shock from which the patient soon rallied and he had a most uneventful convalescence. Almost twelve hours after operation, the nurse reported that he had a slight convulsive seizure of the left arm, but no other convulsive seizure of any description occurred thereafter during the sojourn in the hospital. For three or four days after the operation there was some moderate paresis of the left arm and left leg, but this speedily disappeared. The patient's entire disposition showed a marked transformation. During the early days after operation, he was rather self-willed, petulant and at times difficult to manage, but these characteristics gradually disappeared and when he left the hospital four weeks after the operation, he appeared normal in every way. There was no evidence of any muscular weakness, the mental processes seemed rather abnormally acute, his disposition was excellent and he appeared like an orderly, well-behaved, unusually bright and intelligent boy.

The patient left the hospital on February 5th, apparently well. Some errors of statement occurred, suggesting the mental state preceding the operation, but these responded to correction, and there was no real agraphia or alexia. Nor was there any motor defect. But any jubilation over his restoration was short-lived. Exactly two months after his discharge the mother described recrudescence of the attacks after the manner of the original symptoms. The first demonstration is best described in her own words, under date of April 11, 1916:

"He has been all right until Sunday morning; he was getting ready to get up and was laughing and talking to me; he stopped and had a queer look on his face and commenced to say queer things. It did not last but a minute and he realized he had lost himself. Yesterday at dinner he dropped his bread and head and turned to the left. He knows he has been lost and says, 'I cannot be as I was.' He eats very heartily."

April 17, 1916: "He is getting nervous and fretful again."

May 4, 1916: "Has his lost spells, talks strange and mutters. Says he will drown himself if he is growing bad again."

May 23, 1916: "Sometimes he will have a spell just after breakfast after eating a good meal, and then he declares he has not had a mouthful and will eat as much more. One day he was playing the phonograph; I heard a noise and found him on the floor. He is growing very fat."

October 24, 1916: "Some days he does not know me. He weighs 121 pounds. He is very ugly at times. He again talks of killing himself."

The symptoms of an irritative lesion of the cortex are well known to be more ambiguous than those which result in paralysis, and many attempts at the determination of a focal lesion have failed when too much confidence has been placed in spasmodic conditions which seem to point to a definite cortical center. In this case there were decided and repeated attacks of conjugate deviation of the eyes and head to the left, and these were thought to have some localizing value. On the other hand, the loss of intelligence as represented by agraphia and alexia, suggested a destructive condition in an entirely different region of the brain, the spasmodic condition suggesting an irritation of the right hemisphere and the defect pointing to the left hemisphere.

Conjugate deviation of the head and eyes due to irritation has been attributed to irritative lesions of many parts of the cortex,

and at different times has been assigned to lesions of the frontal, the temporal and occipital lobes. For the case under consideration it is not necessary to consider the center in the pons to which this symptom may be attributed, as none of the symptoms indicated lesion of the pons. The first definite statement as to a center for conjugate deviation of the head and eyes was made by Ferrier, whose experiments on monkeys revealed that stimulation of the posterior half of the superior and middle frontal convolutions resulted in deviation of the head and eyes toward the opposite side, with dilatation of the pupils and wide separation of the lids. This symptom has been emphasized in its relation with epilepsy, and Vorkastner gives it a prominent place in the beginning of the tonic stage of idiopathic attacks, and undoubtedly in many cases of epilepsy this definite phase is associated intimately with the spasms of the limbs. Further corroboration of the existence of such a center may be derived from symptoms occurring in paralytic conditions, for any destructive lesion affecting such a center destroys the cooperation of symmetrical balancing muscles, and in such a case the uninvolved antagonistic muscles act to rotate the head and eyes toward the affected side of the brain.

The whole matter is summed up in Hun's *Atlas* in which he states that conjugate deviation in which the eyes are turned to the side of the lesion may follow a paralytic lesion in almost any part of the brain, and especially one occurring in the posterior part of the frontal lobe; whereas the eyes are turned away from the side of the lesion when there is an irritative lesion of the cortex.

Whatever doubt may have been felt as to the suggestiveness of this symptom was removed by the one attack in which the conjugate deviation was associated with the spasm of the left upper extremity. This seemed to indicate clearly enough an irritation spreading from the middle frontal convolution to the arm area in the precentral convolution of the right side. This was regarded as sufficiently definite to justify an operation at this point, and the operation was consequently performed.

Focal epilepsies are always instructive, particularly when determined by a definite cortical lesion. The mimicry of a cir-

cumscribed affection by the idiopathic disease, or of the latter by the former, may lead to disappointment from attempt at relief by surgical means. Even a definite traumatism may arouse neuro-pathic or epileptoid characteristics plainly predisposing to the disease. For the common formula, "the healthy child, the blow upon the head, the epilepsy," a skeptical editorial writer in the *Medical Record* (May 12, 1917) would substitute, "the epileptic makeup, the blow on the head, coincidental or precipitating, and the epilepsy." From his viewpoint, "if the blow on the head had not been forthcoming the development of the epilepsy would have been delayed until a later stress." True traumatic epilepsy should be independent of all preliminary taint, for "there are a very few cases of adults receiving depressed fractures of the skull with a spicule of bone pressing on some motor area and developing convulsions limited to or at least starting in the groups of muscles controlled by this area."

Surgery, however, is a highly aggressive art, and structures uncovered by the scalpel may disclose unsuspected facts and modify opinions elaborated upon no more substantial basis than theory. Kocher has even advocated decompression operations for the relief of idiopathic epilepsy, and asserts that an opening "large enough to prevent the increase in tension which he believes precedes the attacks" has a favorable effect. The possible benefit of this procedure is attributed by Frazier (*Journal of the American Medical Association*, June 5, 1909) to better discrimination between true and symptomatic epilepsy. He has found, in cases without a suggestion of a focal lesion, a large percentage in which the brain when uncovered presented some gross pathologic lesion (adhesions, oedema, the remnants of an old pachymeningitis, etc.) "so frequently that it would appear as though the so-called idiopathic type was a little less prevalent than we were led to believe before we had so many opportunities as now to study the living pathology of the brain and its membranes."

The case which has been made the subject of this article strongly emphasizes Frazier's contention. The history of repeated traumatisms was suggestive, but not conclusive to the doubter who would attribute the falls to initial seizures. The attacks, considered singly, may be assumed to have represented

wide-spread disease of idiopathic nature. Persistent alexia, agraphia and amnesia were surely misleading and implied deterioration. Petit mal, general severe convulsions, and psychic phenomena were variations too broad to be accepted as of Jacksonian type. But prolonged observation gradually brought to light some distinctive characteristics. The initial phenomenon was conjugate deviation of the head and eyes to the left; this was often followed by flexion of the left upper extremity, and in more severe seizures was amplified into genuine *epilepsia procursiva rotatoria*, the propulsion being likewise to the left. A broad interpretation of Frazier's work would have justified surgical interference without the history of traumatism.

The immediate effect of the operation is instructive. The complete relief of the seizures and the restoration of the boy's intelligence are sufficient proof of a difference between acquired and idiopathic epilepsy even at this susceptible period. Convulsive seizures are rare in adult life, no matter how vicious the lesion. Because there are hundreds of cases of delirium tremens with only an occasional convulsion, there can be no reasonable argument that these occasional attacks are not due to alcoholism. On the other hand the casual incidence of convulsions in childhood from relatively slight causes, does not imply the presence of epilepsy.

Kocher's intrepidity in subjecting idiopathic cases to the knife adds to the many futile attempts to relieve epilepsy which constitute one of the most dramatic chapters of the long history of therapeutics. But if the clinical evidence in the case points to a lesion which can be reached, there is hope in surgery. There may be faith that technique will be found to anticipate the cicatricial disasters of the healing of the wound.

DEMONSTRATION OF OBTAINING BLOOD IN
INFANTS FROM THE LONGITUDINAL SINUS.

BY HENRY L. K. SHAW, M. D.,

Director Division Child Hygiene, New York State Department of Health

The small size of the veins in infants renders it very difficult to secure blood for diagnosis and to utilize the venous system for therapeutic purposes. It is practically impossible to obtain blood from the veins of the forearm. The external jugular is used very frequently but presents some difficulties in inserting the needle on account of the flexibility of the vein. Some men prefer the temporal vein which becomes prominent when the baby cries.

Professor Marfan, a French pediatrician, in 1898 described a method of entering the longitudinal sinus through the anterior fontanel. It was not until the past few years that this procedure has been used in the country and it is now very generally employed.

Anatomically this is an ideal spot to puncture a vein. The longitudinal sinus extends from the frontal bone posteriorly directly in the center of the skull. It is situated in the falx cerebri and covered with the dura mater. It is triangular in shape growing larger as it extends posteriorly. It is about $3/32$ inches in diameter at the anterior angle of the large fontanel and $4/32$ inches at the posterior angle. At the posterior or small fontanel it is $6/32$ inches in diameter but as this fontanel is closed a few weeks after birth it can not be utilized. The anterior or large fontanel does not close until about the eighteenth month, and in cases of rickets and syphilis it remains open for many months.

The technique is simple. The anterior fontanel is shaved and washed. Iodine is applied and the needle inserted about one-fourth of an inch from the posterior angle of the fontanel. The distance to the sinus averages about one-fourth inch. The best needle is 18 gauge with a 45° point. A special needle has been devised with a shoulder one-fourth inch from the point in order to prevent it being inserted too far and transfixing the sinus. About four inches of rubber tubing connects the needle with a

Luer glass syringe and a small piece of glass tubing is inserted about an inch from the needle. This makes it possible to see the blood when the sinus is reached if gentle suction is made with the syringe. The baby's head is firmly held by one assistant while a second assistant manages the syringe. Dr. Helmhotz of Chicago has devised a head clamp which eliminates one assistant. The needle is inserted posteriorally at an angle of about forty-five degrees directly in the longitudinal axis of the skull. When this has been reached a sense of lessened resistance is felt similar to the entrance of the needle in the spinal canal when making a lumbar puncture. The assistant makes slight suction with the syringe and if the sinus has been entered the blood will be seen in the eyelet of the tube. The desired amount of blood can be withdrawn. The needle is then removed and after pressure for a few moments the puncture point is sealed with collodion.

This procedure is useful not only for the purpose of withdrawing blood for diagnosis and venesection but is the best route for direct transfusion of blood in cases of hæmophilia, hæmorrhages, etc. The injection of solutions of glucose and normal salt solution in acute marasmus, of bicarbonate of soda in acidosis, of salvarsan in syphilis, etc., have all been made by this method, with excellent results.

This baby has been placed in St. Margaret's Infant Hospital for adoption. The mother is in a State Institution and is known to have syphilis, and it is necessary to ascertain if the baby is infected. The baby is five months old and the fontanel is fairly large. The pain is very slight and no local or general anesthesia is necessary. (The puncture was made as described above.)

If we find that the Wassermann reaction is positive, the question then will arise as to the best method of administering salvarsan. Dr. Fisher of New York has introduced salvarsan through the sinus in over fifty cases without any bad results. Dr. Dunn, of Boston, on the other hand has had some fatalities from the injection. There is a possibility of transfixing the sinus and having some of the fluid penetrate into the brain with resulting abscesses so that if this method is employed it must be used with great caution.

There is no doubt that this is the simplest, safest and quickest method of obtaining blood for diagnosis and for therapeutic entrance into the venous system. With ordinary precaution in the preparation of the patient and of the technique you will experience no difficulty in obtaining blood for Wassermann tests in infants.

Clinical and Pathological Notes

An Unusual and Interesting Case of Meningitis. By THOMAS W. JENKINS, M. D., Assistant in Anatomy, Albany Medical College.

Mr. H. F., age, 18. April 18, 1915. Student.

Family History. Father died from a hemorrhage after operation for an enlarged prostate. Mother and all the other members of family living and well.

Personal History. This young man was never seriously ill.

Present History. He was found unconscious in the afternoon of a Sunday by his people returning from an outing. He had not complained of any illness until that day, when he said his head ached, but he went out in the morning and delivered his route of papers.

Examination: Patient is unconscious, supra-orbital pressure does not arouse him; light does not disturb him; pupils react to light; knee jerks absent; pulse, 55; temperature, 98°. The bowels were flushed out, no fecal matter following; the stomach was washed out and contained no food, the bladder was catheterized and twenty-two ounces of urine were obtained. The uranalysis showed: no albumin; acidity, 80°; acetone present and glucose to the amount of four per cent. Evidently the patient was a victim of diabetic coma. Venesection was done, thirty cubic centimetres of blood being drawn and thirty cubic centimetres of a saturated solution of bicarbonate of soda was introduced into the circulation, the soda solution being prepared by simply throwing some stock bicarbonate of soda into a glass of boiling water, and when this was sufficiently cooled it was injected into the median basilic vein. Enemata of bicarbonate of

soda were given every hour and soda solution was introduced into the stomach with the stomach tube twice during eight hours.

Eight hours after first catheterization, he was catheterized again and twenty-two ounces of urine obtained which contained glucose and acetone, the acidity being 50°

April 19: The patient was removed to the Albany Hospital and Dr. Andrew MacFarlane was called in consultation. Further venesection was done, sixteen ounces were withdrawn and an indefinite amount of soda solution was introduced. In the mean time the patient had partially regained consciousness and continued to improve until he was able to speak and to complain of headache and backache and he became somewhat rigid. Sugar and acetone disappeared from the urine.

April 20: He still complains of headache and the neck is rigid. Kernig's sign present. Murphy drip of soda solution commenced. Patient's general condition improving. Urine contained neither sugar nor acetone and was alkaline.

April 21: Patient still somewhat better, drinks fluids freely and is given large amounts of water and soda solution, also ten grains of bromide of soda and ten drops of fluid extract of ergot every hour. Unmistakable signs of meningitis are present.

April 22: Paracentesis spinalis was performed by Dr. MacFarlane. The fluid being examined by myself showed 2,460 cells per cubic millimetre; leucocytes, eighty per cent; lymphocytes, twenty per cent; the leucocytes contained diplococci and a culture developed a diplococcus which was proved to be the meningococcus by Dr. Youland of the State Laboratory.

April 25: Flexner's anti-meningococcic serum was administered intraspinally and patient steadily improved.

May 1st: Patient practically well. Temperature ranged from 98° to 101.6°; pulse from fifty-five to ninety.

June 14, 1915: The patient after leaving the hospital and being out doors walking around and apparently making a gradual convalescence, was seized with pains in hips, inguinal regions and in the glans penis; he was constipated and had difficulty in urination. The urine was markedly alkaline and loaded with amorphous and triple phosphates. Dilute phosphoric acid in twenty drop doses was given every two hours and morphia hypodermati-

cally frequently to control pain. This condition lasted several days and finally passed away.

July 1st: The patient was again seized with severe pains in lumber region, in both buttocks and across abdomen and was unable to move because of pain. Temperature, 98°; pulse, 60. Patellar reflex is exaggerated and ankle clonus present. He was constipated and had difficulty in urinating. The urine was alkaline and contained phosphates; no sugar or albumen. We concluded that we had myelitis to deal with and gave a doubtful prognosis to his family. Prescribed salicylate of soda.

However, the young man made a good recovery and now, March 16, 1916, he is apparently well, but has a definite rigidity of carriage. At the present time, 1919, there is no evidence of rigidity.

Editorial

MONOCULUS—for so, in default of catching his true name, I choose to designate the medical gentleman who now appeared—is a grave, middle aged person; who, without having studied at the college, or truckled to the pedantry of a diploma, hath employed a great portion of his valuable time in experimental processes upon the bodies of his fellow-creatures, in whom the vital spark, to mere vulgar thinking, would seem extinct, and lost forever. He omitteth no occasion of obtruding his services, from a case of common surfeit-suffocation to the ignobler obstructions, sometimes induced by a too wilful application of the plant *Cannabis* outwardly. But though he declineth not altogether these drier extinctions, his occupation tendeth for the most part to water-practice; for the convenience of which, he hath judiciously fixed his quarters near the grand repository of the stream mentioned, where, day and night, from his little watch tower, at the Middleton's Head, he listeneth to detect the wrecks of drowned mortality—partly, as he saith, to be upon the spot—and partly, because the liquids which he useth to prescribe to himself and his patients, on these distressing occasions, are ordinarily more conveniently to be found at these common hostelries, than in the shops and phials of the apothecaries. His ear hath arrived

to such finesse by practice, that it is reported he can distinguish a plunge at a half furlong distance, and can tell, if it be casual or deliberate. He weareth a medal, suspended over a suit, originally of a sad brown, but which, by time, and frequency of nightly divings, has been dinged into a true professional sable. He passeth by the name of Doctor, and is remarkable for wanting his left eye. His remedy—after a sufficient application of warm blankets, friction, &c., is a simple tumbler, or more, of the purest Cognac, with water, made as hot as the convalescent can bear it. Where he findeth, as in the case of my friend, a squeamish subject, he condescendeth to be the taster; and showeth, by his own example, the innocuous nature of the prescription. Nothing can be more kind or encouraging than this procedure. It addeth confidence to the patient, to see his medical adviser go hand in hand with himself in the remedy. When the doctor swalloweth his own draught, what peevish invalid can refuse to pledge him in the potion?

Amicus Redivivus.

CHARLES LAMB.



Alumni Day,
1919.

The program for alumni day is already under consideration by the Executive Committee. The success of the meeting of last year, which was vigorous and spirited in spite of the incubus of war, encourages the Committee to even greater efforts in anticipation of a larger attendance. Particular attention will be given to the martial achievements of the veterans who have added distinction to the College, and it is not unlikely that the event will assume some characteristics of a reunion with those who have returned safely from service. Appropriate action of respect to those who have given their lives to the country will be taken. It has been suggested that the Alumni Association erect in the College building a tablet to the memory of those who have made the supreme sacrifice. The details of this plan await elaboration, but undoubtedly the alumni will respond.

The routine of the day will follow that adopted last year with such modifications as experience suggests. The officers of the Association realize that the journey to Albany involves some sacrifice, and that their duty is to provide suitable entertainment

for the time spent in the city by visitors. The entire day will be devoted to some form of business or pleasure.

The Association is fortunate in its President, Dr. Lamb, who has acquainted himself carefully with the details of administration and has personally guided its destinies through this most critical period of its existence. His last circular letter reveals his purpose to launch the Association upon its new voyage.

Alumni, trustees, faculty and students may take heart upon the evidences of renewed vigor of the College, which now is entering upon the brightest chapter of its history.

June Tenth is the date. Every alumnus should fix it in his memory, and make every effort to answer "Present."

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF JANUARY, 1919.

Consumption	23	Bright's Disease	10
Typhoid Fever	1	Apoplexy	10
Scarlet Fever	0	Cancer	13
Measles	0	Accidents and Violence	19
Whooping Cough	0	Deaths under 1 year.....	13
Grippe	35	Deaths over 70 years.....	44
Diarrheal Diseases	33	Death rate	20.50
Pneumonia	8	Death rate less nonresidents	18.00
Broncho Pneumonia	8		

Deaths in Institutions.

	Res.	Non-Res.		Res.	Non-Res.
Albany Hospital	4	11	House of Good Shepherd	0	1
Albany Hospital Camp .	2	2	Child's Hospital	1	1
St. Peter's Hospital	5	7	Federation of Labor		
Homeopathic Hospital .	3	11	Camp	1	0
Hospital for Incurables.	0	3			
Maternity Hospital	0	4		21	49
County Jail	1	0			
Public Places	3	5	Births		181
Albany County Hospital	1	4	Still Births		7

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	3	Tuberculosis	21
Scarlet Fever	11	Mumps	36
Diphtheria and Croup	18	Pneumonia	71
Chickenpox	40	Influenza	853
Smallpox	0	Septic Sore Throat	2
Measles	0		
German Measles	3	Total	1,060
Whooping-cough	2		

Number of days quarantine for scarlet fever:

Longest..... 31 Shortest..... 31 Average..... 31

Number of days quarantine for diphtheria:

Longest..... 18 Shortest..... 10 Average..... 11

Fumigations:

Rooms..... 145 Buildings..... 21

Milk bottles disinfected 28

Communicable Diseases in Relation to Schools.

	D.	S.F.	M.
Public School No. 4.....	1	..	..
Public School No. 10.....	1	..	..
Christian Bros.' Academy .....	..	3	..
St. Joseph's Academy	1	..	..

MISCELLANEOUS.

Cards posted for communi- cable disease	24	Inspections and reinspec- tions	29
Cards removed	10	Vaccinations	42
Notices served on schools..	110	Vaccination dressings	69
Notices served on stores and factories	21	Children examined for em- ployment certificates	15
Postal card returns sent to doctors	24	Number of employment cer- tificates issued	15
Postal card returns received from doctors	12		

Tuberculosis.

Living cases on record January 1, 1919.....	893		
Cases reported:			
By card	18		
Dead cases by certificate.....	3	21	
			914

Dead cases previously reported.....	20	
Dead cases not previously reported.....	3	-
Recovered	4	
Unaccounted for		27
		<hr/>
Living cases on record February 1, 1919.....		887
Total tuberculosis death certificates.....		23
Non-resident deaths:		
Albany Hospital Camp	2	
C. F. L. Pavilion	1	
County Hospital	1	
St. Margaret's House	1	5
		<hr/>
Resident deaths		18
Visits to cases of tuberculosis.....		72
Miscellaneous visits.....		10
Visits to physicians		2

LABORATORY REPORT.

Diphtheria.

Initial Positive	38	Unsatisfactory	21
Initial Negative	480		
Release Positive	18	Total	636
Release Negative	79		

Sputum for Tuberculosis.

Positive	47	Negative	74
		Total	121

Widals.

Positive	1	Unsatisfactory	3
Negative	19		
		Total	23

Meningococcus.

Positive	1	Negative	0
		Total	1

Wassermann tests	174	Miscellaneous examinations.	2
Milk analyses	148		
Water analyses	4	Total examinations	1,109

HEALTH PHYSICIAN'S REPORT.

First District.

Cases assigned	30	Sent to hospitals	2
Calls made	80	Remaining under treatment.	0
Vaccinations	0		

Second District.

Cases assigned	23	Sent to hospitals	1
Calls made	27	Remaining under treatment.	2
Vaccinations	0		

Third District.

Cases assigned	4	Sent to hospitals	2
Calls made	4	Remaining under treatment.	2
Vaccinations	0		

Fourth District.

Cases assigned	19	Sent to hospitals	3
Calls made	36	Remaining under treatment.	0
Vaccinations	0		

Fifth District.

Cases assigned	1	Sent to hospitals	0
Calls made	3	Remaining under treatment.	0
Vaccinations	0		

Sixth District.

Cases assigned	3	Sent to hospitals	0
Calls made	20	Remaining under treatment.	1
Vaccinations	0		

Seventh District.

Cases assigned	2	Sent to hospitals	1
Calls made	2	Remaining under treatment.	0
Vaccinations	0		

Totals.

Cases assigned	82	Calls made	172
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DIVISION OF SANITATION.

Complaints	52	Sewer	0
Privy vaults	4	Filthy yards	3
Closets	2	Filthy alleys	0
Drains	9	Filthy cellars	0
Plumbing	1	Filthy lots	0
Water	3	Filthy premises	2
Stagnant water	1	Manure	0

HEALTH PHYSICIAN'S REPORT—*Continued*

Stable	0	Noise	0
Chickens	3	Unclassified	11
Pigeons	0	Inspections	52
Dogs	0	Plumbing	19
Cats	0	Sanitary	33
Pigs	1	Reinspections	40
Cows	0	Plumbing	18
Dead animals	0	Sanitary	22
Garbage	6	Garbage collected from 3d	
Dump	0	District	115 bbls.
Ashes	3	Garbage collected from 1st	
Smoke	1	District	110 bbls.
Odor	2	Garbage collected from 2d	
Ventilation	0	District	177 bbls.

HEARINGS.

Hearings	3	Cases heard	3
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Class of Cases.

Plumbing	1	Privy vault	1
Drain	1		

Disposition of Cases.

Reinspection	3		
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DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections	77	Stable stands	0
Old houses	77	Shower baths	0
New houses	0	Horse troughs	0
Iron drains	12	Permits issued	36
Connection street sewers	0	Plumbing	35
Tile drains	3	Building	1
Cellar drainers	0	Plans submitted	0
Urinals	3	Old buildings	0
Latrines	0	New buildings	0
Cesspools	11	Houses tested	9
Wash basins	13	Smoke	0
Sinks	7	Blue or red	5
Bath tubs	3	Peppermint	4
Wash trays	2	Water test	0
Butler's sinks	0	Houses examined	25
Trap hoppers	0	Re-examined	88
Tank closets	24	Valid	19
Drinking fountains	0	Without cause	6
Slop hoppers	0	Violations	0

REPORT OF REMOVAL OF DEAD ANIMALS.

Animals removed from 1st Precinct	24	Kennel cats removed	7
Animals removed from 2nd Precinct	19	Kennel dogs removed	8
Animals removed from 3rd Precinct	29	Total	138
Animals removed from 4th Precinct	23	Horses removed	25
Animals removed from 5th Precinct	28	Dogs removed	52
		Cats removed	61
		Total	138

DIVISION OF MARKETS AND MILK.

Public market inspections ..	25	Dairies inspected	0
Market inspections	30	Milk cans inspected	486
Fish market inspections	0	Milk cans condemned	0
Fish peddler inspections ...	0	Lactometer readings	47
Slaughter house inspections.	0	Temperature readings	47
Rendering establishment inspections	0	Fat tests	77
Pork packing house inspections	0	Sediment tests	65
Hide house inspections	0	Chemical tests	18
Milk depots inspected	18	Cows examined	0
Stores inspected	124	Cows quarantined	0
		Cows removed	0
		Complaints investigated	4

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—STATISTICS FOR FEBRUARY, 1919.—Number of new cases for this month, 405; classified as follows: Charity cases, 196; cases moderate income, 90; metropolitan, 119; cases carried from last month, 99; total number of cases under care during month, 504. New cases classified according to disease: Medical, 182; surgical, 13; obstetrical—prenatal, 22; confinement, 33; maternity, 7; tuberculosis, 17; dispensary s. s., 91. Disposition: Removed to hospitals, 13; died, 10; discharged cured, 212; discharged improved, 110; discharged unimproved, 6; discharged to other care, 16; discharged to dispensary, 4; number of patients still under care, 123. Cases reported by physicians, 25; metropolitan agents, 63; patient's families or friends, 100; nurses, 18; other sources (miscellaneous, 29; R. C., 1; dispensary, 9; Asso. Char., 2; Home Service, 1), 52.

Special Obstetrical Department.—Number of obstetricians in charge of cases, 2; number of students in attendance, 2; number of new cases this month, 4; number of nursing visits, 10.

Visits of Nurses (all departments).—Number of nursing visits with nursing treatment, 1,342; number of social service visits, 180; number of prenatal, 52; other calls, 174; number of tuberculosis visits, 209; total number of visits, 1,957.

Dispensary Report.—Number of clinics held, 71; number of new patients, 131; number of old patients, 523; total number of patients treated during month, 654. Classification of clinics held: Prenatal, 1; surgical, 5; nose and throat, 7; eye and ear, 17; skin, 7; medical, 8; venereal, 4; lung, 4; dental, 1; neurology, 3; paediatrics, 11; gynecological, 6. Tuberculosis division, classified for relief and disposition: Assisted with medicine—Guild, 2; dispensary, 7; assisted with food, 7; assisted with clothing, 3; total number assisted, 19. Disposition of cases: Discharged, 1; sent to hospital, 3; returned from hospital, 2; died, 10; carried over, 1,268.

F. R. FREEMAN, Superintendent.

POST-GRADUATE COURSE IN INFECTIOUS DISEASES AND PUBLIC HEALTH.—The course, an outline of which follows, is offered through the cooperation of the Albany Medical College and the New York State Department of Health. It is believed that it will appeal to health officers and other physicians because of its practical features and the fact that a minimum sacrifice of time and money will be required of its participants.

Registration will be limited to graduates in medicine and so far as practicable the course will consist of informal conferences and practical demonstrations. It will be noted that a special effort has been made to coordinate the various laboratory, clinical and didactic features with reference to various subjects and diseases.

Attention is called particularly to certain features which will prove of especial interest to registrants both as health officers and practicing physicians:

Practically all of one day will be devoted to consideration of the most recent advances in diagnosis, management and treatment of pneumonia, both from the laboratory and clinical standpoint;

A forenoon will be devoted to practical demonstration and discussion of the physical diagnosis of incipient tuberculosis, with opportunity to examine cases and compare findings;

Special consideration will be given to the essential features of theory of infection and immunity, to important diagnostic laboratory tests and to the prophylactic and therapeutic use of vaccines and sera.

The fee for the course has been reduced to twenty-five dollars, payable in advance or in monthly installments. Those who have completed other New York State health officers' courses are invited to attend all or any part of the present course, upon payment of a nominal fee of five dollars.

FACULTY OF INSTRUCTION

- HERMANN M. BIGGS, M. D., Commissioner of Health.
- THOMAS ORDWAY, M. D., Albany Medical College. Associate Professor of Medicine and Dean.
- CHARLES C. DURYEE, M. D., Sanitary Supervisor, State Department of Health, Director of Course.
- JOSEPH S. LAWRENCE, Chief, Bureau of Venereal Diseases. Former Bacteriologist-Pathologist, State Department of Health.
- AUGUSTUS B. WADSWORTH, M. D., Director, Division of Laboratories and Research, State Department of Health.
- M. EDGAR ROSE, M. D., Supervisor of Tuberculosis, State Department of Health.
- MATTHIAS NICOLL, JR., M. D., Deputy Commissioner, State Department of Health.
- ARTHUR SAUTTER, M. D., Health Officer, Albany, N. Y., Clinical Professor of Dermatology and Contagious Diseases.
- ISAAC W. BREWER, M. D., Lecturer, Bureau Venereal Diseases, State Department of Health, formerly Lieut. Col. Medical Corps, U. S. A.
- FREDERICK W. SEARS, M. D., Sanitary Supervisor, State Department of Health.
- PAUL B. BROOKS, M. D., Acting Director, Division of Communicable Diseases, State Department of Health.
- L. M. WACHTER, Chemist, State Department of Health.
- J. H. MILLER, D. V. S., Chief Milk Inspector, City Department of Health, Albany, N. Y.
- HENRY J. BRAYTON, M. D., Superintendent, Onondaga County Hospital.
- JAMES C. AYER, M. D., Surgeon, Bureau of Venereal Diseases, State Department of Health.
- THEODORE HORTON, C. E., Director, Division of Sanitary Engineering, State Department of Health.
- H. L. K. SHAW, M. D., Director, Division of Child Hygiene, State Department of Health.
- L. W. GORHAM, M. D., Albany Medical College, Instructor in Medicine and Clinical Pathology.
- EVERETT S. ELWOOD, Secretary, State Hospital Commission.
- JOSEPH A. WARREN, Legal Adviser, State Department of Health.
- WILLIAM A. HOWE, M. D., State Medical Inspector of Schools, State Department of Education.
- JOSEPH E. CLARK, M. D., Sanitary Supervisor, State Department of Health.
- JOHN A. SMITH, M. D., Secretary, State Department of Health.
- OTTO R. EICHEL, M. D., Director, Division of Vital Statistics, State Department of Health.
- H. B. CLEVELAND, C. E., Principal Assistant Engineer, Division of Sanitary Engineering, State Department of Health.

TENTATIVE PROGRAM SUBJECT TO CHANGE.

(NOTE.—Unless otherwise indicated laboratory demonstration will be held at the Albany Hospital, under the direction of the staff of the Division of Laboratories and Research, State Department of Health, and other conferences and lectures at the Albany Medical College.)

Wednesday, March 5.

- 9:30 A. M. Introduction to course. Dr. DURYEE.
- 10:30 A. M. Lecture and demonstration on general bacteriology and technique, at Albany Medical College. Dr. LAWRENCE.
- 12:30 P. M. Round table luncheon. Informal talk on the activities of health officers. (Place to be announced.) Dr. BIGGS.
- 2:00 P. M. Conference on the general diagnosis and management of tuberculosis. Dr. ROSE.

Wednesday, March 12.

- 9:30 A. M. Laboratory work. Practice in making, staining and examining smears, etc.
- 1:30 P. M. Diagnosis of the exanthemata. Dr. NICOLL.
- 2:30 P. M. Visit to Albany Hospital, Pavilion G. Contagious Department.
- Conference on common skin diseases. Under direction of Dr. SAUTTER.

Wednesday, March 19.

- 9:30 A. M. Laboratory. Pneumococcus differentiation (including animal demonstration). Demonstration of prophylactic and therapeutic measures in pneumonia.
- 1:30 P. M. Diagnosis and treatment of pneumonia with clinical demonstration. Dr. ORDWAY.
- 3:30 P. M. Subject to be arranged at first session.

Wednesday, March 26.

- 9:30 A. M. Laboratory diagnosis of typhoid and paratyphoid; detection of carriers in typhoid, and paratyphoid, dysentery, etc.
- 1:30 P. M. Conference on typhoid and paratyphoid immunity. Dr. BREWER.
- 2:30 P. M. Epidemiology of typhoid and paratyphoid. Dr. BROOKS.

Wednesday, April 2.

- 9:30 A. M. Laboratory. Diphtheria, Vincent's angina and allied throat infections. Virulence test for diphtheria.
- 1:30 P. M. Municipal control of diphtheria, including dosage and methods of administration of antitoxin. Dr. SEARS.
- 3:30 P. M. Demonstration of Schick test, and active immunization. Dr. LAWRENCE.

Wednesday, April 9.

- 9:30 A. M. Laboratory: Demonstration of preparation of vaccines.
1:30 P. M. Lecture, demonstration and conference on infection, immunity and anaphylaxis. Dr. WADSWORTH.

Wednesday, April 16.

- 9:30 A. M. Lecture, demonstration and conference on serum therapy and vaccinothrapy.
1:30 P. M. Smallpox and vaccination. Dr. CURTIS.
2:30 P. M. Smallpox and sanitary code. Dr. DURYEE.

Wednesday, April 23.

- 9:30 A. M. Laboratory: Demonstration of influenza bacillus, streptococcus, staphylococcus and other bacteria of the upper respiratory tract.
1:30 P. M. Conference on influenza. Dr. NICOLL.
2:30 P. M. Conference on organization for control and relief in epidemics. Dr. BROOKS.

Wednesday, May 7.

- 9:30 A. M. Lecture and demonstration of sanitary examination of milk and water. Mr. WACHTER.
1:00 P. M. Visit to certified dairy. Under direction of Dr. SHAW.
3:00 P. M. Visit to pasteurization plant. Under direction of Dr. MILLER.

Thursday, May 8 (forenoon only).

- 9:00 A. M. Conference (with practical demonstration, examination of cases and exhibition of X-Ray plates) on early diagnosis of tuberculosis. Dr. BRAYTON.

Wednesday, May 14.

- 9:30 A. M. Laboratory: Demonstration of treponema pallidum, gonococcus, and the preparation of arsphenamine.
1:30 P. M. Conference on control of venereal diseases, including discussion of venereal disease laws and regulations. Dr. LAWRENCE.
2:30 P. M. Demonstration of administration of arsphenamine and pneumonia serum. Dr. AYER.

Thursday, May 15 (forenoon only).

- 9:00 A. M. Conference on water supply and water purification. (Visit to filtration plant.) Under direction of Mr. HORTON.

Wednesday, May 21 (at Schenectady).

- 10:00 A. M. Conference on health administration. Visit to city health department and health center. Under direction of Dr. DURYEE.
- 1:30 P. M. Conference on infant hygiene and prenatal care (at Child Welfare Station). Dr. SHAW.
- 2:30 P. M. Conference on bedside and terminal disinfection. Dr. DURYEE.

Thursday, May 22 (forenoon only).

- 9:00 A. M. Conference and practical demonstration: dairy inspection and scoring. Under direction of Dr. MILLER.

Wednesday, May 28

- 9:30 A. M. Demonstration: Lumbar puncture and spinal therapy Dr. GORHAM.
- 1:30 P. M. Duties of health officers in connection with the insane. Mr. ELWOOD.
- 2:30 P. M. Conference on general laws relating to duties and powers of health officers and health boards. Mr. WARREN.

Thursday, May 29 (forenoon only).

- 9:00 A. M. Conference on medical school inspection. Dr. HOWE.
- 10:00 A. M. Conference on mental hygiene. Dr. CLARK.

Wednesday, June 4

- 9:30 A. M. Conference on control of communicable diseases in schools. Dr. SMITH.
- 11:00 A. M. Conference on vital statistics. Dr. EICHEL.
- 12:30 P. M. Round table luncheon. Informal talk on application of military hygiene to civil life. (Place to be announced.) Adjutant General BERRY.
- 2:30 P. M. Conference and general discussion on sanitary code. Dr. DURYEE.

Thursday, June 5 (forenoon only)

- 9:00 A. M. Demonstration of disinfection and sterilization. Mr. WACHTER.

Wednesday, June 11.

- 9:30 A. M. Conference on dysentery and intestinal infections. Dr. SMITH.
- 11:00 A. M. Preventable diseases of adult life. Dr. ORDWAY.
- 1:30 P. M. Review and general discussion including health law, sanitary code, health administration, communicable diseases and epidemiology. Dr. DURYEE and Dr. BROOKS.

Thursday, June 12 (forenoon).

9:00 A. M. Conference on disposal of sewage. Mr. HORTON

10:00 A. M. Conference on rural sanitation. Mr. CLEVELAND.

Wednesday, June 18

Final examinations (written).

Address all communications and applications to

CHARLES C. DURYEE, M. D.,
State Department of Health, Albany, N. Y.

DR. FARRAND APPOINTED HEAD OF RED CROSS.—Dr. Livingston Farrand, president of the University of Colorado, has been appointed by President Wilson as chairman of the Central Committee of the American Red Cross, to succeed William H. Taft.

As chairman of the Central Committee, Dr. Farrand will become the executive head of the National Red Cross organization on the retirement of the War Council, which will take place March 1st.

In changing the Red Cross from a war to a peace basis far greater tasks will be involved than those undertaken during the ante-war period, tasks that will require the full time of those interested with the executive duties.

Since the entrance of the United States into the war, Dr. Farrand has been the director of the tuberculosis work of the International Health Board in France, and has been in close contact with Red Cross activities. His broad knowledge of European conditions, his high executive qualifications and the vital force of his very unusual personality will all be vital factors in increasing the usefulness and broadening the scope of Red Cross work.

Dr. Farrand's work in this and foreign countries has shown administrative ability of the highest order and in dealing with complicated political, social and professional situations overseas he has displayed in a marked manner exceptional qualities of diplomacy, tact and co-operation.

That the program of the American Red Cross under peace conditions will be virile, statesmanlike and broad is unquestioned.

PERSONAL.—Colonel THOMAS W. SALMON.—Dr. Salmon's achievements in the service of his country have received merited recognition by the National Committee for Mental Hygiene, of which he is medical director, absent on leave. Dr. Salmon graduated from the Albany Medical College with the class of 1899. At the annual meeting of the National Committee, held in New York on February 8, 1918, Dr. G. Alder Blumer, acting as a "Committee on Resolutions," submitted the following minute, which was adopted and approved at the session of February 5, 1919, and

has recently been published. During the year, Dr. Salmon has been elevated to the rank of colonel, and had added further distinction to a notable career. By a curious coincidence, lying in a fact probably forgotten by the author of the tribute, Dr. Salmon was a student to whom Dr. Blumer, as professor of mental diseases in the Albany Medical College, expounded the mysteries and resources of psychiatric medicine, and unwittingly laid the foundation of the success which has since come to the pupil.

Whereas, Major Thomas W. Salmon, M. O. R. C., is absent from this annual meeting on account of war service in France with the American Expeditionary Forces, which he is serving as chief consultant in neuropsychiatry, be it *resolved*, that the occasion be seized to spread upon our records the following Minute as tribute and greeting to the medical director of the National Committee for Mental Hygiene and adviser to the Rockefeller Foundation on subjects relating to mental health.

Minute

Dr. Thomas W. Salmon, before entering upon work in mental hygiene, was for fourteen years a member of the United States Public Health Service. While serving the Government his attention had been directed toward problems relating to the insane and thus he became the logical choice of the National Committee for its medical directorship, in which position, since 1912, he has been continuously active and extraordinarily efficient, insomuch that at the recent annual meeting of the National Institute of Social Sciences he was awarded a presentation medal in recognition of his distinguished services in the field of mental hygiene. What Major Salmon has accomplished since our declaration of war, at home and abroad, in laying the foundations for adequate care and scientific treatment of mental and nervous diseases in the Army and Navy is a matter of common knowledge to many of us. If one were challenged to crowd into a single sentence the reason for his achievements, one might say that he presents the combination of qualities mentioned by John Adams as essential to the performance of a herculean task in 1776, to-wit, "the meekness of Moses, the patience of Job, the wisdom of Solomon, with the valour of David."

A member of this National Committee has well said that "his great success is dependent primarily upon an absolutely free mind—that is, free from conflicts, it being conflicts which make a man hesitate and doubt and make it impossible for him to see the clear, straight, simple and direct path of procedure." Another has recorded his appreciation by saying that "many of the men whose scientific researches would never have been possible but for Dr. Salmon's work may outshine him in worldly fame, but none will be likely soon to show such a union of social imagination with practical cogency among men." In the happy phrase of William James, all his work "clicks into place." A third member has

animadverted on his mental processes as "continuous, unbroken by over-valued ideas and obsessions, and on his being a good example of common sense at its best." For, after all, how true a saying it is: "Common sense is the treasure of the mind and judgment is the key to its storehouse, even as diamonds enhance the hue of rubies or emeralds." Still another members says of Major Salmon that "more than any man of his time he is able to make practical and scientific conditions of the various theories of the psychologists, psychiatrists and the specialists in nervous disease." And if one may add one more appreciation to this mosaic of encomium, let it be in the words of another member: "His medical ability has been made very much more productive through his wide outlook and through his unusual realization of the profound social significance of his special branch of medicine."

Finally, one may reflect that while the prosaic mind may organize and prepare, and demonstrate efficiency, something more is necessary for final and progressive action. That something exists in Major Salmon's vision and humanism, without which, as alas, we know to our sorrow, man may be for efficiency instead of efficiency for man.

The National Committee for Mental Hygiene looks forward to the time when Major Salmon may resume his great work at home after a war-won peace and meanwhile consoles itself, and bespeaks solace for him, in that fine Homeric line which in our vernacular has been rendered, "For an enduring heart have the destinies appointed to the children of men."

Voted, That the above resolution be and it hereby is unanimously adopted and that it be incorporated in the minutes and full proceedings of the 10th annual meeting of the National Committee, and that a copy of it be sent to Major Salmon.

—Lieutenant WILLARD ELMER WHELOCK (A. M. C., '14), has been recommended for the Distinguished Service Cross. The recommendation, made by Major Ervin E. Newcomb of the 307th Infantry to the Commanding General of the Seventy-seventh Division, is as follows:

"The award of the distinguished service cross to First Lieutenant Willard E. Wheelock, medical corps, 307th infantry, is recommended for extraordinary bravery and heroism in action at Remilly-Sur-Meuse, France, on the 8th of November, 1918.

"Lieutenant Wheelock maintained the battalion station in this town, which was under heavy enemy artillery fire. During this incessant shelling, the building in which the aid station was located, was demolished by artillery fire. There were many patients in the station at the time. During all this Lieutenant Wheelock was giving first aid to the wounded, and assisting in the removal of the patients to a nearby cellar. Just as the last patients were about to be placed in safety a shell entered the building, mortally wounding Lieutenant Wheelock's assistant. He calmly saw to it that all patients were in safety and administered to his dying

companion, in utter disregard to his own personal danger. The splendid example set by this officer was an inspiration to all. I personally witnessed this act."

—Dr. LOUIS HERBERT GAUS (A. M. C., '07), Major, commanding the 106th Field Artillery, formerly the Second Field Hospital of Albany, was promoted on February 19th, 1919, by General Pershing, to rank of Lieutenant-Colonel. The 106th Field Hospital is part of the famous Twenty-Seventh Division, which made such a surpassing record of heroism in the dauntless attack which broke the supposedly impregnable Hindenburg line.

—Dr. WALTER D. McKENNA (A. M. C., '11) has been promoted from the rank of Captain to that of Major in the Medical Corps attached to the American Expeditionary Force, France, and has been assigned as medical attaché to the Peace Commission in Paris.

—Dr. ARTHUR KRIDA (A. M. C., '11), ranking as Captain, is stationed as orthopedic surgeon at Oxford, England.

In Memoriam

CHARLES BYRON TEFFT, M. D.

Dr. Charles Byron Tefft, President of the Association of the Alumni of the Albany Medical College in 1905, died at his home in Utica, N. Y., October 31, 1918. The following estimate of his life of great usefulness is republished from the local paper of that date:

THE CITY LOSES CAPABLE PHYSICIAN.

Dr. Charles B. Tefft Died in Local Hospital—Suffered Stroke of Paralysis Week Ago.

Utica, N. Y., Oct. 31, 1918.—Dr. Charles Byron Tefft, one of the best known physicians of Central New York and one of the most respected residents of Utica, died at 9 o'clock this morning in a local hospital, following a stroke of paralysis suffered a week ago today. Dr. Tefft, although in his 81st year, was in full use of all his faculties until his final illness. The news of his death will be learned with regret by hosts of acquaintances in this city and vicinity.

Dr. Tefft, after rounding out a half century of useful and steady service as a general practitioner, retired two years ago to enjoy a well-earned rest. He enjoyed one of the largest practices in the city and county at one time, and his wise counsel and experienced medical ability were widely recognized and appreciated. In his passing the city loses one of its most highly esteemed and venerable citizens, and the community one of its most capable physicians.

Dr. Tefft was born in the town of Remsen, March 5, 1838, son of the late John D. and Sophia Messenger Tefft. His paternal grandfather was of Huguenot descent and was one of the first settlers in Remsen, coming to the vicinity from Rhode Island. Dr. Tefft's father was a farmer and also taught school in the vicinity of Remsen. Dr. Tefft received his early education in the district schools of Remsen and at Fairfield Seminary, Herkimer county. He later took up the study of medicine in the Albany Medical College, from which he was graduated in 1865.

Following his graduation, Dr. Tefft went to Forestport, and practiced his profession with increasing success there for about five years, when he moved his office to Alder Creek. The work in country districts in those days was most arduous, Dr. Tefft having to ride many miles to attend his patients. Many were the interesting tale he could tell of his early experiences in the sparsely settled section of the State in his early days as a physician.

Dr. Tefft moved to Utica in 1870, and soon firmly established himself as a physician of unusual ability. His success was at once assured, and his practice became one of the largest in the county. He resided at 8 Henry street for many years, and had his office in the Gardner Building and later in the Arcade Building. He later purchased the home at 333 Genesee street and thereafter made his residence and office at that place.

Dr. Tefft never specialized in any medical work, but was of that old school of practitioners who could handle practically every kind of sickness or injury. His kindly ways and sympathetic nature won for him the deep regard of all his patients, and his memory will long be cherished by the many in whose family he was the physician for two or more generations.

In his medical career Dr. Tefft served the county twice as coroner. He took a keen interest in all public and medical activities, and his counsel was always eagerly sought in important matters pertaining to the welfare of the city and community. It was mainly through his untiring efforts that the city ordinance was passed over a quarter of a century ago in relation to stray cattle and animals roaming the city at large being impounded. This matter was quite important in those days, various sections being considerably bothered by cattle, pigs and other animals roaming about the city.

Dr. Tefft also took a deep interest in the matter of sanitation, and was ever a leading factor in securing proper legislation in health matters pertaining to the welfare of the community as well as the State. He had written several important papers in the matter. He was especially keen on sewerage disposal and water supervision, and his efforts in bringing about improvements in this matter were widely known and appreciated.

Among the medical fraternity Dr. Tefft was especially well known and prominent. He was an active member of the Utica Medical Society, the

Oneida County Medical Society, the American Medical Association, the New York State Medical Society and the Utica Medical Library Association. He took an active interest in these societies and had written many important papers on medical subjects which were widely read. He was recently made an honorary member of the Oneida County Medical Society.

Aside from his medical activities, Dr. Tefft took a leading part in amalgamating the street railway lines of the city into the Utica Belt Line. With Charles Mather and other Uticans he organized the old Bleecker street line and other independent street car service, and helped place the trolley car service on a firm foundation in Utica. The Utica Belt Line eventually was amalgamated into the New York State Railways, but Dr. Tefft relinquished his holdings in the line long before this.

Although his practice took up most of his time, Dr. Tefft was ever a devout churchman. He was one of the leading founders of Plymouth Congregational Church and served as a trustee of the church for about 15 years. He took a very important part in placing the church on a firm foundation. About 20 years ago he withdrew his membership from Plymouth Church, and became affiliated with Westminster Presbyterian Church. Since joining this church he had also become one of its most active and influential members. He was made an elder of the church and served faithfully as such until the time of his death. He organized the young men's society known as the Chevaliers, and was instrumental in making it the large and successful church organization it is today. He also served as superintendent of the Sunday school of Westminster Church for several years. His services at Westminster Church were invaluable and were greatly appreciated. He was a Republican in politics and took an active interest in all political matters.

Dr. Tefft was twice married, his first wife, Miss Sarah Antoinette Maben, of Halcott, Greene county, dying July 1, 1888. Two years later he was married to Miss Anna Bamber, of Utica, who survives. Dr. Tefft also leaves three children by his first wife, as follows: Mrs. F. M. Miller, of 40 Jewett place; Mrs. F. A. McElroy, of Williamsport, Pa., and Dr. Charles D. Tefft, of Williamstown, Mass. Another daughter by his first marriage, Marion, wife of Lewis G. Fay, of Brooklyn, died some time ago. Dr. Tefft is also survived by the following grandchildren: Arthur T. Fay, of Pittsburg; Mrs. Leon G. Ross and Frederick M. Miller, Jr., of this city; Mrs. R. D. Spraker, of Cooperstown, and the Misses Katherine and Frances McElroy, of Williamsport, Pa.; also three great grandchildren: Rowen and Inez Tefft Spraker, of Cooperstown, and Antoinette Ross, of Utica, and two sisters, Mrs. E. H. Bullock and Miss Susan M. Tefft, of Syracuse, the latter formerly of this city.

Dr. Tefft's career as a medical practitioner has been a long and important one. He was a man of deep sympathies and he went into the homes of his patients with the earnest desire to aid them in their hours

of trouble and to extend to them not only all the skill he possessed, but material aid and comfort if it were possible to do so. Of deep religious convictions, and one who believed in good living, he not only administered to the bodily ailments of his patients, but on many occasions, all through his practice, he ministered to the mind, and never failed to extend such good advice as he deemed necessary and wholesome. He became not only the physician, but the friend and mentor, and in those happier days, when the world was not rushed and hurried by so many demands, Dr. Tefft was sought by those old families and early residents who wanted near them some friend upon whom they could rely for advice and direction. He was, therefore, the ideal "family doctor," around whom cluster so many romances and responsibilities, and who is ever looked upon as one of the members of the household in which he attends upon those who are suffering. However, Dr. Tefft did not stand still in his study and practice of medicine. He kept up with the times, and sometimes abreast of them. He was a thinker and reasoner, and his skill was never in question as long as he was able to attend to the calls made upon him in his profession. He did not relinquish any of those methods which he had found by long experience to be efficacious, but he adopted whatever in the new practice he found to be of value in saving human life and preventing human suffering.

Thus, all through the many years in which he has been a physician in Utica he has striven to help those who came under his care. It was not so much for the amount of money that he could earn in so doing, as it was his inherent desire to help others. It has been said of him that he was a much better distributor than he was a collector. His hand was ever in his pocket in the aid of charity or want of distress of any kind. It is not probable that he ever, so long as lay in his power, resisted a call for assistance or turned a deaf ear upon want. He was public spirited, for he was always interested in every movement for the good of the city and the country. He "stood his share," either in the giving of money or the performance of work, for all public and patriotic objects. He was at times called upon as a speaker upon religious, social and public topics, and he was ready to respond with the best that was in him. Even last summer, when his health was in a most precarious state, Dr. Tefft prepared a talk to boys, and he was greeted by a large audience at the Y. M. C. A. on an occasion when the boys of the city were invited and of which they took good advantage.

In his church and social life he was a broad thinker and a most loyal friend and companion. His home was ever open to his friends, and he gave them such courteous, dignified and ready welcome as belongs to that school of hospitality in which the true gentlemen are teachers. He had no patience with sham, and he was quick and ready to identify and encourage true worth.



GEORGE HUDSON, M. D.

Dr. George Hudson, an alumnus of the Albany Medical College of the Class of 1882, died at his home in Stillwater, N. Y., on January 30, 1919. The respect and affection in which Dr. Hudson was held by the community he served for nearly forty years were attested by the large attendance at his funeral and by the many tributes of personal and public grief. The members of the Mason's fraternity and of the fire department attended in a body and the board of education adopted a touching memorial minute signifying the extent of their loss.

Dr. Hudson was born at West Farms, New York City, 66 years ago. When but a child he moved with his parents to West Sand Lake, where the greater part of his early life was spent. He attended the Averill Park Academy, studied medicine with Dr. Nichols of Sand Lake and later completed a course at the Albany Medical College. In the fall of 1880 he came to Stillwater where he had, during his many years of unselfish service among the people, grown into their confidence and love as perhaps no other person ever did. Always bright and cheerful, he brought sunshine to every home. He had served the village in many capacities; for several terms as its president. He was active in Red Cross work; a director in the War Chest Association, a worker in the Liberty Loan campaigns, and various other local activities. He was a member of

Montgomery Lodge, F. & A. M.; for many years a trustee in the Presbyterian church, and at the time of his death was serving as president of the board of education, and as health officer. He had also previously served as president of the Saratoga County Medical Association. The survivors are his wife, formerly Miss Louise Newland of this place, to whom he was married in 1888; two daughters, Miss Marjorie, of Stillwater, and Miss Alice, who is instructor in English at the Liberty High School; two sisters, Mrs. Alice Sutliff and Miss Eliza Hudson, of Gloversville.

HERMAN VEDDER MYNDERSE, M. D.

Dr. Herman V. Mynderse died at his home at Lake Hill, Scotia, N. Y., March 5, 1919, after an illness of ten days, after thirty-five years of practice which gained for him the respect and affection of his community, largely an expression of gratitude for his work among the poor.

Dr. Mynderse, a descendant of one of the old Schenectady county families, was born May 29, 1861, in Schenectady, and was the son of the late Dr. Barent A. Mynderse and Albertina Ten Broeck. He was a graduate of Union Classical Institute in 1880, Union College in 1884 and of Albany Medical College in 1887. After graduating from Albany Medical College he acted as an interne in the Maternity Hospital and the Charles Hospital in New York City for several months. After leaving Charles Hospital, he practiced in Schenectady.

He was a member of Delta Phi Fraternity at Union, and was president of the Mohawk National Bank since 1907. He was also a trustee of the Schenectady Savings Bank. He was the first president of the village of Scotia, and served several terms. Prior to this he had been a member of the Schenectady board of education. He was also a prominent member of the First Reformed Church, Schenectady.

Dr. Mynderse married on October 1, 1908, Miss Helen Louise Dow, of Poughkeepsie, daughter of J. DePeyster Dow and Marianna Lanman. The deceased leaves his wife; a sister, Mrs. Edwin McClellan, of London, England, and a brother, William T. B. Mynderse, of Holland House, Scotia.

★CHARLES GILCHRIST BRIGGS, M. D.

Dr. Charles Gilchrist Briggs, of Schenectady, aged fifty-four, winner of the French Croix de Guerre for "courage and bravery" at Verdun in the summer of 1916, died March 2, 1919, at the home of his friends, Mr. and Mrs. Jesse Lovejoy, in Schenectady. Dr. Briggs had been suffering from Bright's disease and his condition was aggravated by influenza. He is survived by a sister, Mrs. A. Russell Lynd, of Dover, N. J.

Dr. Briggs was born March 25, 1865, at Malta, Saratoga county, the son of Daniel Cody and Catherine Gilchrist Briggs. He attended Drury College, Springfield, Mo., after which he entered the Albany Medical College. He was graduated from that institution with the honor of salutatorian in the spring of 1889. He served an internship in St. Peter's

Hospital, Albany, and in 1891 commenced the practice of his profession in Schenectady. Before entering war service, his practice was very extensive; he was recognized as one of the foremost physicians in this section of the state and was liked and admired by all who knew him. Many persons today owe their lives to Dr. Briggs' efforts, both in Schenectady and in England and France.

On February 22, 1892, he was married to Miss Laura H. Phillips.

Dr. Briggs leaves a brilliant war record. On June 10, 1916, he took up his duties as a member of the American Volunteer Ambulance Corps, serving first with the British and subsequently with the French armies. The ambulance corps was afterward disbanded and Dr. Briggs was transferred to the American Red Cross in July, 1917. But before this he was placed in charge of American Ambulance Corps No. 7, well known as the Norton-Hargies Corps. This division was one of the most famous in the war.

His humane work at Verdun in the summer of 1916 won for him the Croix de Guerre for "courage and bravery which did not give way for a single instant under most perilous circumstances; he directed the removal of the wounded with calm and self-sacrifice which won the admiration of all," the citation read. He was a captain in the service.

Dr. Briggs visited Schenectady last June when he was called upon by many organizations to describe his experiences in the war zone in France. He had been in charge of a large hospital at Neuilly, just outside of Paris, and had cared for hundreds of wounded men brought to the institution from the battlefield. His description of the work he was engaged in was thrilling and interested all who had the pleasure of hearing him. He spoke before New Hope Lodge of Masons and at the Mohawk Club.

When day after day last summer he read in the press of the retreat of the French toward Paris and of the advance of the Germans he concluded to return to the scene of action and do his part in helping those who were wounded. It was known to his friends that he could not remain away from "his boys" longer so he returned to Europe. In the fall he went to the Italian front, but his health declined to such an extent that he was forced to go to Paris.

Failing to improve, he journeyed to New York City where in January he went to the Presbyterian Hospital. His condition gradually grew worse and on February 7th he traveled to the Mohawk Club in Schenectady and was removed to the Lovejoy home.

Dr. Briggs' advice was sought in his professional capacity by courts, institutions and individuals in this section. Often he was called upon by judges on the bench to render an opinion as to the physical or mental condition of persons. He was one of the consulting physicians of the Ellis Hospital and held membership in the Schenectady County Medical Society, New York State Medical Society and the American Medical Association, Mohawk Club, Mohawk Golf Club, Phi Sigma Kappa Fraternity, New Hope Lodge, No. 730, Free and Accepted Masons, and he was a director of the Schenectady Trust Company.

ALBANY MEDICAL ANNALS

Original Communications

PHYSICAL AND MENTAL CONDITION OF DELIN- QUENT BOYS.

*Read before the Capitol District Conference of Charities and Correction,
Albany, N. Y., April 2, 1919.*

By CLINTON P. McCORD, M. D.,

Health Director, Board of Education, Albany; Consulting Psychiatrist, Berkshire
Industrial Farm at Canaan, N. Y.

For the last few years organizations like this Conference have carried on their programs topics similar to those that are up for discussion this evening. Usually the discussions have been lengthy, sometimes bitter, and they have been presented to listeners who, as far as fundamental principles are involved, did not need to be convinced. Seldom were there present at such meetings any considerable number of judges, lawyers, doctors and state and municipal officials—the very people whose understanding and cooperation would have made practicable the application of the truths developed. The trouble is that the people who are present at these meetings do not require conversion upon ninety per cent of the platform while the people who are “holding up the procession” are not here and have not heard the truth as it has been presented, this evening, for example. The motto, that “public health is purchasable” applies equally well to the question of individual efficiency and social harmony. When a philosophy similar to that which projects preventive medicine is seen to hold in preventive criminalistics then will we see a drop in the curve of crime and delinquency similar to the drop in the

curve of preventible disease plotted on the books of all well equipped state and municipal health departments. In spite of all the machinery of police systems, courts and reformatory and penal institutions the incidence of crime and delinquency remains static. It is not necessary to tell you workers that this indicates that the forces thus far focused upon these conditions have been curative and not preventive in character, and that the roots of the trouble will continue to nourish and feed these socially and economically undesirable weeds as long as society contents itself with simply clipping off some of the unsightly blossoms. There are many sides to this question of prevention of delinquency that suggest themselves to you. A portion of such a program surely involves a discontinuance of certain obviously extravagant, unproductive and foolish supposedly remedial methods, and the renouncing of unproductive procedures—"cures" that have not cured, reformatory methods that have not "reformed." When a man serves his fifth sentence or his fourth or his third or his second for a crime of a certain character; or, when a juvenile delinquent has repeatedly been an object of concern on the part of a community, the least that can be expected is that someone should question the value of the methods available for handling the case. The physician who without a diagnosis continued to administer exclusively a single remedy day after day with the result that the patient grew gradually worse would be open to severe criticism. Yet, this is exactly the complexion of our methods in dealing with delinquency and crime. Out of one hundred superintendents of reformatories who five years ago were asked what definite scheme they had for the reformation of their juvenile charges, a scheme scientifically developed and specifically applicable to the individual case, ninety-nine acknowledged that they had no definite plan. What I have said in the last few minutes is in no sense a reflection on the interest, earnestness, and high ideals of the persons engaged in court, probation or reformatory work; it simply means that such interest, earnestness, and idealism have been expended along blind-alley lines. The day is passing when the conscience of any person responsible for the disposition or treatment of a delinquent will be satisfied to deal with such a case except in accord with a full knowledge of the

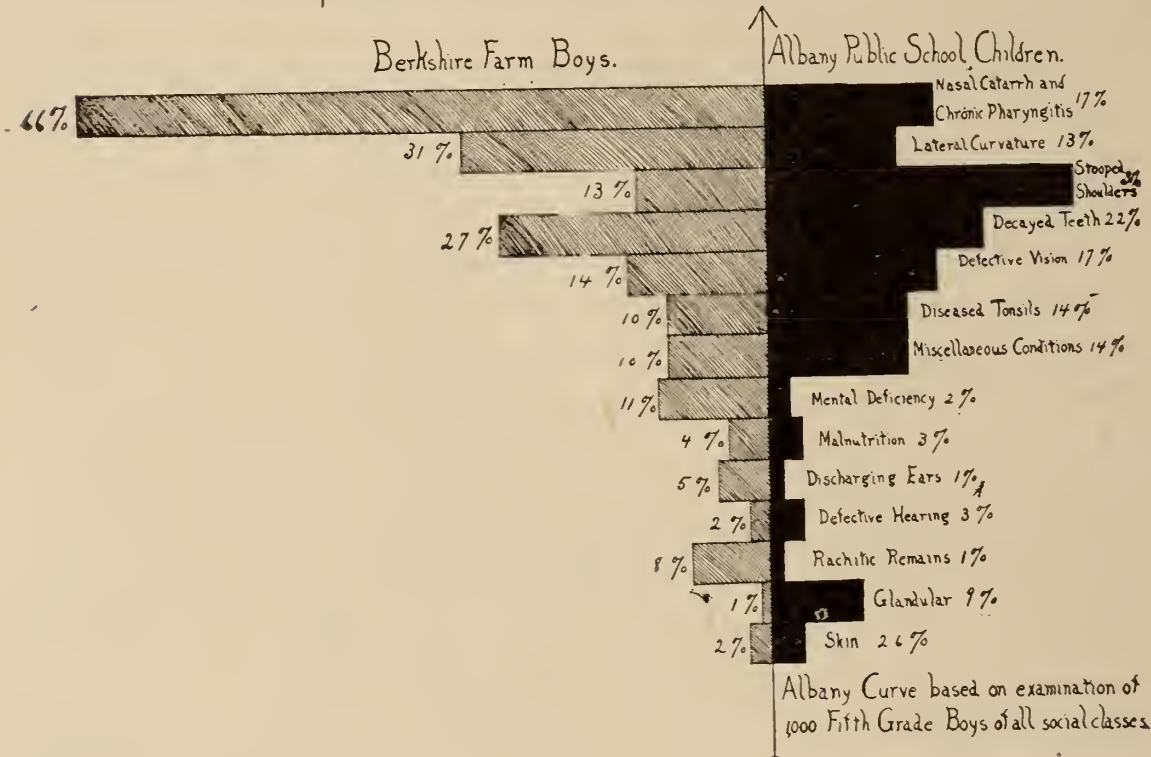
facts relating to the physical, mental, and environmental status of the case. Then cases for probation will be scientifically selected; so-called reformatories will be free from the feeble-minded; the real indeterminate sentence will be a fact and the proper educational, social, recreational and vocational organization of our reform institutions will be accomplished. The Berkshire Industrial Farm at Canaan for over a year has maintained by virtue of an unusual superintendent and an enlightened Board of Managers what we feel is a fundamental feature of such an institution in the light of what we have said in the foregoing paragraphs, namely complete physical, neurological and mental examinations of all boys sent there from various sections of the country. We believe that such examination of the cases committed to a reformatory is as *imperative* a feature of the institution as is *food* and *shelter* for the children. We believe that when the economic and educational principles involved in this statement are fully recognized, the misdirection and waste of philanthropic monies put into reclamation work will be evident. In that day, before a cent of public money or private money goes into work with delinquents we shall demand to know whether there is some possibility of the results being commensurate with the cost; and the answer to this question can be given only in terms of scientific examination, prognosis and recommendation upon the individual case to whom our reformatory program is to be applied. At Berkshire the wisdom of such provision has been demonstrated to a degree from the dollars and cents standpoint even in the brief time the plan has been in operation. As yet it is too early and the details of the program for certain reasons have not been far enough advanced to appreciate the finer rewards along the educational line and in the field of mental adjustments and reformation of personality. I trust it will be interesting, however, to give you a brief statement upon the subject assigned to me, "Physical and Mental Condition of Delinquent Boys," in this particular institution.

COMPARATIVE CHART OF LEADING PHYSICAL DEFECTS.

The foregoing chart represents physical examinations of the initial hundred cases at Berkshire Farm compared with the results

of examination of one thousand Albany school children of about the same age and of all social classes. It will be noted that abnormal conditions of the nose and throat are roughly four times as common amongst the delinquent boys. Some of the factors functioning in this instance are quite evident to us. Orthopedic conditions of the spinal column are about balanced. Decayed teeth are a trifle more prevalent amongst the delinquents in spite of the fact that many of them have had institutional supervision for some time. Defective vision is less prevalent amongst the delinquents as are also diseased tonsils and various miscellaneous

Comparative Chart Of Leading Defects.



and minor physical defects. Malnutrition is twenty-five per cent more common amongst the delinquents, but the condition usually persists for only a few months following admission to the regular life and habits and fresh air of the institution. The evidences of early rickets exists eight times more frequently amongst the delinquent boys. Discharging ears are five times more common amongst the delinquent boys which fact correlates naturally with the greater prevalence of nasal catarrh and chronic pharyngitis amongst the institution children. The item of greatest signifi-

cance is the relative incidence of mental deficiency, this condition being five and one-half times more common amongst delinquents; and if the border-line cases are considered, then the delinquent group presents twenty-three times as many cases as does the unselected public school group.

REMEDIAL PHYSICAL DEFECTS AMONGST BERKSHIRE CASES.

It is only in line with good hygiene and humane policy that the physical condition of the child must be considered before any line of training is pursued. Malnourished children, children with decayed teeth, defective vision, nasal obstruction, etc., have, as a result of research, fallen into the class of cases that represent a heavy expense to a school system when these defects are permitted to persist. In school hygiene the fact has been definitely accepted that it is actually cheaper to treat the teeth of children, to feed the malnourished, etc., than it is to permit these conditions to persist and to assist in bringing about retardation and repetition of grades. It is doubly imperative that we correct such conditions as a part of our program in the treatment of delinquents. Let us glance hastily at the remedial physical defects exhibited in the group of Berkshire boys:

Diseased tonsils—10 per cent.

Nasal obstruction—1 per cent.

Defective vision—14 per cent.

Decayed teeth—27 per cent.

Discharging ears—5 per cent.

Malnutrition (all recent admissions)—4 per cent.

Hernia—2 per cent.

Varicocele—3 per cent.

Tongue-tie—1 per cent.

Nasal catarrh, chronic pharyngitis or both—66 per cent.

Orthopedic conditions, including flat foot (12 per cent)—57 per cent.

Impacted ear-wax—21 per cent.

Circumcision indicated from the standpoint of personal hygiene—47 per cent.

Circumcision indicated from the standpoint of reflex irritation—17 per cent.

OTHER CONDITIONS AMONGST DELINQUENT CASES.

Speech defects—3 per cent.

Malocclusion of teeth—15 per cent.

Club foot—1 per cent.

Double inguinal hernia (operated)—1 per cent.

Hypo-spadias (operated)—1 per cent.

Cardiac murmur (functional in nature)—2 per cent.

Cardiac arrhythmia (functional)—10 per cent.

Poor vaso-motor tone (including a marked case of dermagraphism)—27 per cent.

Disorders of smell (poor discrimination; dull sensibility; finer recognition lacking)—10 per cent.

Disorders of taste (finer discrimination lacking; failure to recognize and appreciate higher dilutions of salt, sweet, sour, and bitter—54 per cent.

Defective color vision (red-green blindness)—3 per cent.

Not vaccinated against small-pox—12 per cent.

The Wassermann reaction on the basis of the first hundred cases was negative in 98 per cent and a reaction of no significance was obtained in 2 per cent.

The above findings are of interest from an administrative standpoint, since they outline the physical problems that call first for consideration in the application of reformatory methods. The elimination of physical handicaps as far as practicable before an extensive or earnest program of reform is applied is only simple economy.

PUBERTAL DEVELOPMENT OF DELINQUENT BOYS.

Pre-pubescence—60 per cent.

Pubescence—20 per cent.

Post-pubescence—20 per cent.

Sexual acceleration—23 per cent.

Sexual retardation—51 per cent.

While individual study reveals a few cases of premature and superdevelopment along sex lines the tendency seems to be toward *retarded* sex development.

SEX HISTORY.

Onanism:

Solitary—81.

Mutual—10.

No evidence—9.

In the case of the younger boys the act consisted in abortive attempts, but in 36 per cent masturbation with orgasm was regularly practiced.

Aberration:

Sodomy—3 per cent.

Other perversions—1 per cent.

The question of physical retardation and acceleration presented itself as follows:

Percentage physically accelerated:

1 year—14 per cent.

2 years—3 per cent.

3 or more years—2 per cent.

Percentage physically retarded:

1 year—15 per cent.

2 years—18 per cent.

3 or more years—2 per cent.

Anthropometric curves were plotted on the basis of Dr. Smedley's tables and included height standing and sitting, weight, dynamometer records, right and left, and vital capacity.

MENTAL CONDITION.

General classification according to intelligence (100 initial cases):

Superior intelligence—2 per cent.

Average intelligence—31 per cent.

Dull normal intelligence—21 per cent.

Border line deficiency—35 per cent.

Feeble-minded (all of moron grade)—11 per cent.

Classification according to types and personalities:

Feeble-minded (stable type)—3 per cent.

Psychopathic feeble-minded—8 per cent.

Epileptoid constitution—6 per cent.

Psychopathic (unclassified)—28 per cent.

Adolescent instability—27 per cent.

Aberrational (questionable)—2 per cent.

Mixed types—26 per cent.

Such an attempt at classification by types has its evident defects and is, in the main, of questionable import.

SPECIAL PSYCHOLOGICAL ITEMS IN REFERENCE TO THE FOREGOING CASES.

With poor auditory memory—34 per cent.

With poor visual memory—25 per cent.

With poor power of memory and recall—26 per cent.

With tendency to uncontrolled behavior—45 per cent.

On the basis of fifty additional cases admitted to the institution during the last year we find no reason to alter greatly our opinions on the findings on the initial 100 cases. The percentage of cases of diseased tonsils, nasal obstruction and defective vision and discharging ears has been raised somewhat above that obtained for the initial 100 cases, and we have had a case of epilepsy, one of congenital syphilis, one of tuberculosis of the hip-joint and one case suspicious of pulmonary tuberculosis. Embryological defects such as hypospadias and hernia also occurred. There is an increase in the number of feeble-minded children and children of superior intelligence admitted to the institution in the additional group of 50 cases.

Facts of general sociologic and eugenical significance in the consideration of cases were gathered, and included significant information in reference to disrupted home, drunkenness, drug addiction, illegitimacy, insanity, invalidism, sex perversion, prison and reformatory records, epilepsy and feeble-mindedness; but the consideration of these matters in relation to the cases does not fall under a brief statement such as I wish to make upon the subject assigned. We plan to report upon these cases under the following heads:

Bulletin 1, which places in the hands of the Superintendent lists of boys that suffer from remedial physical defects and carries suggestions in reference to their correction.

Bulletin 2, which sets forth a classification of the boys from the standpoint of intelligence.

Bulletin A, which is a statistical summary of the results of the physical and neurological examinations, outlining the physical problems that call first for consideration in the application of reformatory methods.

Bulletin B, which is a statistical summary of the results of intelligence tests; along with Bulletin A it comprises a brief synopsis of the Berkshire survey and should be of informative value to the managers of the Farm and to the various agencies that commit cases to the Farm.

Bulletin 3, requiring a more extended analysis of the mental examination plus the application of additional psychological tests, which when complete for each case will constitute helpful aids to officers and teachers in the proper training and management of the individual boy.

GENERAL SUMMARY.

Let us face what we have at this particular institution:

At least 12 per cent of the boys are feeble-minded; 10 per cent follow perverted sex practices; 16 per cent have defective vision; 51 per cent suffer from sexual retardation; 35 per cent are physically retarded. There are 66 per cent psychopathic, epileptoid constitution, aberrational, etc.

Abnormal nose and throat conditions, secondary middle ear infection, decayed teeth, are more common amongst delinquents. Defective vision is less common. Embryological defects and stigmata of degeneration are more common amongst delinquents. From five and one-half to twenty times more delinquent children are feeble-minded than public school children of the same age.

Reform institutions should exist roughly for three purposes:

1. To restore the erring one to a life of usefulness.
2. To secure permanent disposition of the cases and to add to the sum total of human progress.
3. To be laboratories for the study of errors of conduct so that society may profit.

Courts unprovided with psychiatrists and hampered from lack of proper institutional facilities and committing laws will continue

to send feeble-minded children to reform schools for some time to come; but one of the best ways to open the eyes of law makers and committing agencies to this fact is by the reform schools recognizing these cases and refusing to complicate their administration by keeping them and attempting the impossible in correctional treatment. The truth should be faced and we should know what manner of boys have been sent to our reformatories. Our recommendations in reference to a number of older feeble-minded boys bring us face to face with the need of definite supervision and special training for such cases outside existing state institutions. The need of provision for placement and supervision of the high-grade defective, whether he be a delinquent or a potential delinquent is a pressing one. As Dr. Victor Anderson in the recent report to the New York State Commission of Prisons on mental disease and delinquency pointedly says: "The existence of mental disease and various mental defects in a fairly large proportion of the inmates of prisons and reformatories makes clear how futile it is to merely go on blindly administering the law instead of endeavoring to solve the problems these individuals present. A similar situation in treating disease would consist in sending all sick persons to hospitals to be given the same treatment, fixing in advance the length of time they were to remain and then sending them out without any reference to whether they were well or not. The mere knowledge of the existence of these conditions is not enough; such knowledge should be made the basis for treatment. Constructive efforts should be made to rehabilitate these persons in the light of the needs of each individual person; not only of his disabilities but of his capabilities and his adaptabilities." It is needless for me to quote the percentage of the various abnormal physical and mental conditions amongst delinquents tabulated by various investigators; they all tell practically the same story. Our little contribution agrees in the main with the others, with added conclusions to which I have specially referred.

In closing let us state that many needs are suggested by the results of complete examination of the delinquent boys in this institution. The chief arguments for such routine procedure as a

definite feature of the program of any reform institution might briefly be indicated as follows:

1. Through such examination the institution is protected from the expense, waste of time and energy of attempting to handle as a reform case a boy who because of syphilis, gonorrhea, tuberculosis or other serious diseases may be an expensive and unproductive case upon which to expend the program of the institution; or who because of feeble-mindedness or epilepsy is classed from the start as an improper case for reform treatment and is later discharged into society. From eleven to at least twenty per cent of the boys now sent to the Berkshire Farm fall into these classes.

2. Such examination reveals the boys who are suitable subjects for a real reform program, and the analysis of the cases individually should result in definite recommendations of great value in measuring justice to the boy at the Farm in terms of school training, emotional appeal, disciplinary attitude, etc., and in helping the institution to individualize the boy and to get the best results in terms of improvement in conduct and development of character for the money and energy expended. This applies perhaps to from sixty to eighty-eight per cent of the boys at Berkshire.

3. The provision for such examination on the part of an institution is an evidence of the scientific attitude toward the children entrusted to its care in contrast to the old, sentimental, guess-work which frequently resulted in waste of money and effort and injustice to the child. The provision naturally answers an increasing demand on the part of committing agencies for a proper individualization of their charges; it assures these agencies that the findings of scientific research are being utilized for the benefit of the cases that they have placed in the institution, and that the institutional authorities are not "working in the dark" in reference to the daily needs of these delinquent boys.

4. Provision for such examination is a piece of constructive, social and humanitarian work the value of which cannot appear fully except after a period of several years. Scientific study of delinquents in institutions should result in a contribution to the knowledge in this field which should mean a large saving in

money and energy for the institutions of this type, and which may well result in a worth-while modification of our reformatory methods and in a development of a program that, shorn of haphazard methods, trial and error procedures and blind following of custom, will secure a maximum of results because it will be based upon scientific *truth*—a program that will insist upon a diagnosis before it wastes time, energy and money upon treatment. Honor and gratitude await the philanthropic men and women interested in the subject of delinquency who are first to insist that money spent in reform work is misspent when directed toward doing the impossible when known methods of determining the possibilities of a given line of procedure have not first been employed. Such persons today are going to insist that before we put money into a program to be applied to a group of delinquents we must know, so far as science can tell, what kind of material we have to work upon; if mental defect or disease renders certain individuals unable to profit from such a program then it is foolish to waste it upon them; and if others are able to profit then it is desirable that the best method of application shall be selected for each individual; these facts can be determined only by comprehensive study of the individual, and this line of activity should be the first to be insisted upon in any scheme or expenditure along reform lines.

ILLUSTRATIVE REFORMATORY CASES.

Case 128:

Physical and Neurological Condition: This boy has what is probably an early tuberculosis of the left hip joint. He has a left ruptured ear drum with defective hearing and a discharge of puss; he also suffers from nasal catarrh and a lateral curvature of the spine. He has slight disturbance of the sense of taste. Circumcision is indicated. Masturbation with orgasm has been established and he has the sex development of a boy older than—that is, he is sexually accelerated about two years. His tonsils are diseased and the left cervical lymph nodes are enlarged. He has eczema of the face.

Wassermann Reaction: Negative.

Psychological: He ranks as a case of borderline deficiency very close to the feeble-minded group if not actually within it. His auditory memory is poor and he has little power to plan or to appreciate the point to a situation. He is very discouraging material from the school standpoint.

He shows marked tendency to uncontrolled behavior (running away, etc).

Developmental Data: He was in the New York Juvenile Asylum for nearly two years for "incurability," the parents having made the complaint. He wanted to go to work and was truant from school and the Court sent him to the Farm. He is an only child. The father is in the Navy.

Summary: Tuberculosis of hip joint; defective hearing and discharging ear; lateral curvature of spine; nasal catarrh; borderline intelligence; tendency to uncontrolled behavior; masturbation with sexual acceleration.

Prognosis: Because of his tuberculosis hip he would naturally become a case for hospital care, and with the necessary appliances would be rendered a semi-invalid for a period of perhaps two years. During this time he would not be in a physical condition to profit from the life and activity of the Farm, and he is therefore, in my judgment, not a suitable case for the Farm to attempt to handle. From the mental side he is also a discouraging case for reform work.

Recommendations: He should be placed in a large institution which has facilities for classified hospital care.

Case 92: This boy has only light sense in his right eye and one-half vision in the left eye. He has a decayed six-year molar tooth, and circumcision is indicated. In the special sense field he is lacking in the finer discriminations of taste. His physical development is normal for his age. He masturbates regularly. He has no ability to plan and has but little auto-criticism. He has poor visual memory and deficient auditory memory and cannot be taught by precept. In the language field he has the development of an eight-year-old child in spite of his sixteen years. He has poor power of concentration and is irresponsible when confronted with an emergency or a new set of conditions. He cannot manage himself with prudence except under careful supervision. He will never be able to benefit by ordinary school work beyond an inferior level and will be slow to profit by experience. He is permanently arrested mentally at about the ten-year level of intelligence; and because of his unstable nervous reactions he should have custodial care with suitable manual work. At large in society he will only add to the burden of poverty, disease and crime.

Case 89: This boy is a case of borderline deficiency with psychopathic tendencies. Physically he has stooped shoulders and suffers from eyestrain. He should be circumcised. Although he is underdeveloped sexually he masturbates daily and suffers considerably as a result from nervous irritability.

He has defective color vision (red-green blindness) which must be taken into consideration in his school work. His auditory memory is poor and he is limited in his ability to plan. He lacks power of abstrac-

tion and school work should be approached in a concrete fashion, emphasizing visual memory in which line he is fairly good. He will not profit to any degree from experience and will probably repeat his mistakes frequently. He lacks the power to make adjustments from day to day with changing conditions and companionship, and should be closely watched and studied during the next year or two for the first signs of adolescent insanity, attempting, however, in the meantime to bring him into a healthy relationship with his associates, and letting him feel the stimulus of adult personal interest and confidence. Facts of related social significance: A feeble-minded great-uncle and a feeble-minded sister; disrupted home life. The boy should remain at the Farm and be studied further.

Case 132:

Physical and Neurological Condition: This boy suffers from a very bad visual defect and marked nervous instability. He is underdeveloped physically and has decayed teeth and nasal obstruction. He has a left ear that may discharge in winter weather. He is physically retarded more than two years.

Wassermann Reaction: Positive (four plus).

Psychological: He is a case of borderline deficiency. He is very unstable nervously and lacks the ability to stick at a task. He lacks ability to attend to a given set of instructions and will attempt to execute upon a vague impression and not because he has heard and understood instruction. He had but little power to plan and cannot reason from cause to effect. His visual as well as his auditory memory is poor and his power in the language field is very limited. He jumps at first conclusions on the strength of some one striking feature of a subject, and has little power of self-criticism. He does not examine any proposition in a critical fashion but reacts to primitive instincts. He has a marked overflow of nerve energy with weak attention but an engaging manner, superficial in type. He can best be reached through the sensorial side and an appeal to his own selfish instincts. Not much can be expected from him along abstract lines, nor is he open to the usual appeals to the sentiments to any degree worth while.

Summary: Defective vision; decayed teeth; nasal obstruction; discharging ear; borderline deficiency; nervous instability; syphilis.

Prognosis: Bad. Because of his syphilis and his low intelligence he is not a fit case for the Farm to expend its energies upon.

Recommendations: Because of the expense and the difficulties incident to the proper treatment of his syphilis it would be inadvisable to retain this boy at the Farm. Not much can be expected from him in the matter of educational or reforming treatment. He will probably be best disposed of in an institution for the psychopathic feeble-minded.

On the other hand, other cases could be given where the examinations revealed that the case was one exactly suited to the life of the Farm, and where certain capabilities and disabilities could be indicated with recommendations for the proper handling of the boy.

Examinations have shown that the Farm has many boys who are of such mental and nervous constitution that they cannot with justice be released from the institution until they are eighteen or more years of age and have passed beyond certain adolescent disturbances. This means that these boys, most of whom are motor-minded and will find their life work in some of the trades, should receive at the Farm during this extended stay adequate vocational and industrial training; such training is not at present offered at the Farm.

This necessitates a broadening and enriching of the program, including development along industrial lines and the beginnings at least of the trades if not considerable portions of them. This would constitute real vocational guidance with a chance to select and serve a part apprenticeship with credit such as is given in many of our city vocational schools. As a supplement to this there should be a "follow-up" bureau to secure transfers direct to the jobs, so that the boy is not dependent upon the weak moral and economic support of the home people after leaving the institution, which support has shown itself so entirely inadequate and unfit to guide and control and help the boy in the past. This "follow-up" bureau might also handle the "field work" so necessary in connection with the cases at the Farm from the standpoint of a full diagnosis in the individual case. Such a field worker could look up family histories and secure first-hand information about the boy's home conditions, social and neighborhood environment, heredity and history of delinquency previous to his coming to the Farm. These facts would help greatly in a scientific study of the kind of material that the Farm is being asked by the courts and various social agencies to deal with. This bureau could also "follow-up" the cases after they were placed in jobs and secure true and valuable post-institutional histories thus helping to measure truthfully the results of the activities of the Farm in terms of boys restored to useful and worthy lines of endeavor.

Correspondence

THE ALBANY HOSPITAL AND MEDICAL COLLEGE. BASE HOSPITAL UNIT, No. 33.

J. TOWNSEND LANSING
President

HAROLD C. GOODWIN, M. D.
Superintendent

ALBANY HOSPITAL.

Founded 1849

ALBANY, N. Y., March 25, 1919.

DEAR DR. MOSHER:

The accompanying letters, relating to the character of the work done by our base hospital unit, and the official commendation of its efficiency, complete a very satisfactory record of our enterprise. I suggest that they be published in the ALBANY MEDICAL ANNALS.

Sincerely yours,

J. TOWNSEND LANSING.

U. S. ARMY BASE HOSPITAL, No. 33,
PORTSMOUTH BOROUGH ASYLUM.

PORTSMOUTH, ENG., Feb. 4, 1919.

*Edmund N. Huyck, Esq., Secretary, 319 State Street, Albany,
N. Y.*

DEAR MR. HUYCK:

I am writing you as chairman of the committee which prepared and published the report of this base hospital unit to give you a brief summary of the work accomplished by the unit during its period of active service. I regret very much that I have been unable to write to you before this, but the pressure of work here since I returned to the unit on August 2, 1918, has been steadily increasing and the opportunity of formulating anything in the nature of a comprehensive survey of the situation has not presented until now. You are already fully acquainted with the history of the organization after it left Albany and up to and including the time when the first patients arrived in the institu-

tion, July 24, 1918. When I arrived here in August, convoys of patients were being received practically every day and from that time until the signing of the armistice and for some days thereafter the number of patients under treatment increased steadily and at times rapidly. Although there were actually six hundred beds ready for occupancy on the second of August, there yet remained much to be done and it was fully a month from that time before all departments of the hospital were completely equipped and in full running order. The essentials, however, had been attended to and we are able to say that from the date of the first admission no patient was sent here who did not find awaiting him everything that was necessary for his proper care. Up to the latter part of September the majority of admissions were surgical cases. These were received practically direct from the front, even reaching here within forty-eight hours of the time they had received their wounds and with the original dressings applied in the casualty clearing stations untouched. This, of course, provided a most active and interesting service for the surgeons. The eagerness and ability with which officers, nurses and men attended to every detail of the care of the patients reflected credit on them all. In the latter part of September the influenza epidemic brought about a sudden change in the situation and every hospital in England was filled to overflowing with cases of influenza, pneumonia and meningitis. This brought about a temporary stoppage of the flow of wounded from France, gave the surgeons a much needed rest and brought to the medical side of the house an opportunity for service which they met with equal enthusiasm and self-sacrifice. The situation was one which strained our capacity and ability to the utmost, but the personnel and equipment proved fully adequate to meet the emergency. During this period, however, the new construction had proceeded without interruption. Additional facilities for the care of new cases were being constantly provided and within a very short time wounded from the Western front were again being received in large numbers. On December 1st we received orders to start the evacuation of wounded and on December 31st the

hospital was empty. On January 10, 1919, the hospital was officially closed for the reception of patients and since then we have been engaged in disposing of property and preparing to comply with orders to return to the United States, which are now daily expected. This, in brief, is an outline of our work and when the details of what has been accomplished here become known, I am convinced that Albanians will be proud of the unit and will feel that the efforts and sacrifices they made to send out an organization worthy of the best traditions of Albany have been justified.

I doubt if anyone in Albany before we left realized fully how well selected, thoroughly trained and completely equipped this organization was. It required the test of actual service under war conditions to bring to maturity and make evident the really exceptionally fine quality of this unit. I can say without hesitation that Albany has good reason to be proud of the unit and of the work that Albanians did in organizing and equipping it and in stating this I am not giving my personal opinion alone, but am repeating what has been said many times by people not connected with Albany and who are in a far better position to judge of relative values than I am. When the test came the demands made on us were such that success or failure depended not on any individual or group of individuals, but on the coordinated efforts of all and I shall always be glad to have had a share in the activities of an organization which so continuously and with such conspicuous ability performed the work allotted to it.

I have made reference to the completeness of our equipment. It will be a satisfaction to all at home to learn that the equipment given to this unit, both in scope and quality, fully measured up to the highest standards and met every demand. I cannot even now command sufficient time to discuss this matter in as much detail as I should like to. There were some things which we did not need, owing to the fortunate local conditions under which we have lived and owing to our rapid growth some of our equipment was quantitatively inadequate, but it was obviously impossible to anticipate this. We found a kitchen, laundry, bake house and machine shop already equipped in this building. By

adding such equipment as we had brought over to what was already here we found ourselves adequately and even luxuriously provided for in these departments. Our X-ray and photographic apparatus, laboratory equipment and surgical instruments and appliances we installed intact. An emergency operating room was soon available and the generous supply of bandages, dressings and linen provided by the Red Cross chapters in Albany and neighboring towns enabled us to meet every need of the surgical service from the outset. Not once has our work in any department of the hospital been hampered or lowered in standard through lack of proper equipment. That is a record of which any hospital might be proud and when we consider that the equipment was assembled to meet uncertain and changing conditions, that it was packed, transported three thousand miles and installed throughout by our own enlisted men and successfully met a situation where more than three thousand five hundred patients passed through our hands in five months, the record is even more noteworthy. The wisdom and foresight displayed in foreseeing all needs and the sound judgment shown in the purchase of material of so excellent a quality is certainly a most legitimate cause for satisfaction.

It will interest you to learn of the ultimate disposition of this splendid equipment. We have moved it all from the hospital to a large collecting depot which has been established at Winchester, some thirty miles from here. It is the present intention of the army authorities, I believe, to make further use of this equipment in the hospitals of France and Belgium, particularly in Belgium, where the need is so acute. I am sure that those who so generously gave these things will be glad to know that their usefulness has not ceased with the closing of this hospital.

Permit me in closing to express to you and through you to the generous citizens of Albany, Schenectady and elsewhere, who donated it, the sincere thanks and appreciation of all connected with this unit. The greatest satisfaction that can come to a doctor is to feel that he is giving the best of everything to the patients entrusted to his care. That satisfaction has come to the

doctors who have served with this unit, largely because their fellow citizens made it possible through their gifts.

Very sincerely yours,

ERASTUS CORNING,
Lt. Col., M. C., U. S. A.

NATIONAL OFFICERS

WOODROW WILSON, President
ROBERT W. DE FOREST, Vice-President
JOHN SKELTON WILLIAMS, Treasurer
JOHN W. DAVIS, Counselor
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WILLIAM HOWARD TAFT
Chairman Central Committee
ELIOT WADSWORTH, Vice-Chairman
GEORGE E. SCOTT, General Manager

RED CROSS WAR COUNCIL

By Appointment of the President of the
United States

HENRY P. DAVISON, Chairman
JOHN D. RYAN
CORNELIUS N. BLISS, JR.
HARVEY D. GIBSON
GEORGE B. CASE

—
Ex Officio
WILLIAM HOWARD TAFT
ELIOT WADSWORTH

THE AMERICAN RED CROSS

NATIONAL HEADQUARTERS

WASHINGTON, D. C.

FEBRUARY 28, 1919.

*President, Board of Trustees, Albany Hospital and Medical
College, Albany, New York.*

DEAR SIR:

Base Hospital No. 33 will soon return home. Will you please notify the American Red Cross immediately upon its arrival, as information from the demobilization camps is frequently delayed and the Red Cross is very anxious to know just when this hospital is finally released from military service and returned to civil life? The Red Cross has peace plans for the hospital, which we trust will meet with the approval of your institution, and which we will take up with you at that time.

Thanking you for your courtesy in giving us this information, I remain

Very truly yours,

C. H. CONNOR.
*Colonel Medical Corps, U. S. Army.
Ass't Director Gen., Military Relief.*

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THE AMERICAN RED CROSS

NATIONAL HEADQUARTERS

WASHINGTON, D. C.

MARCH 11, 1919.

*President, Board of Trustees, Albany Hospital and Medical
 College, Albany, New York.*

MY DEAR SIR:

The American Red Cross is pleased to forward you the enclosed letter from the Surgeon General, in which he commends the work of Base Hospital No. 33.

It is a great satisfaction to the American Red Cross to have been able, through the patriotic assistance of your institution, to render such service to our Government. The American Red Cross extends its thanks and congratulations to every member of Base Hospital No. 33 and to the Albany Hospital and Medical College, which was able to put such an excellent unit into the service of this country.

The American Red Cross earnestly seconds the wish of the Surgeon General that you will keep this organization intact for any further emergency that may arise and it is believed that the personnel of Base Hospital No. 33 will also wish to keep the unit together and to keep alive, for all time, the fine spirit of those, who, as the original members of this hospital, made this record of achievement possible.

Very truly yours,

C. H. CONNOR.

*Colonel Medical Corps, U. S. Army.
 Ass't Director Gen., Military Relief.*

WAR DEPARTMENT
OFFICE OF THE SURGEON GENERAL
WASHINGTON

MARCH 5, 1919.

*Board of Trustees, Albany Hospital and Medical College, Albany,
New York.*

(Through the American Red Cross, National Headquarters,
Washington, D. C.)

GENTLEMEN:

Red Cross Base Hospital No. 33, accredited to the Albany Hospital and Medical College, having been returned to this country for demobilization, I take this opportunity to express my appreciation of the invaluable services rendered the Nation by this splendid organization.

It will always be remembered that the first organizations of the American Army to be sent overseas were six Red Cross base hospitals, and at the time of the great Allied offensive, beginning July 18, 1918, thirty-nine of the forty-five base hospitals on duty in France and England were Red Cross hospitals.

Their readiness for service and the patriotic devotion to duty, as well as the professional excellence of the personnel of these organizations, have made them the chief reliance of the Medical Service of the forces in France, while those on duty with the British have rendered equally valuable and appreciated aid to the British Army.

It is earnestly recommended that effective measures be taken by you to keep the organization of your unit intact and that every effort be made to imbue its future personnel with the fine esprit to be expected in the possessors of the glorious heritage of splendid achievement handed down from the Great War by the original personnel of Base Hospital No. 33.

In this connection I desire to invite your attention to the excellent work done by Major A. W. Elting, M. C., as Director of Base Hospital No. 33, and to ask that you convey to him my sincere appreciation of the value of the service he gave to our country in its time of need.

Sincerely,
M. W. IRELAND,
Surgeon General, U. S. Army.

U. S. ARMY BASE HOSPITAL No. 33

CAMP UPTON, LONG ISLAND, N. Y.

MARCH 3, 1919.

Mr. Edmund N. Huyck, Secretary, 319 State Street, Albany, N. Y.

DEAR MR. HUYCK:

On February 5, 1919, Colonel Erastus Corning left Base Hospital No. 33 for duty with the North Russian American Expeditionary Forces at Archangel and I was placed in command of this organization. My duties in this capacity have been especially pleasant inasmuch as orders for our return to the United States came through February 11th and we left Portsmouth at 6:30 A. M. on the following day. After an uneventful trip on the S. S. Olympic, starting from Liverpool, and two days' stay at Camp Merritt, N. J., we arrived in Camp Upton February 28th and Base Hospital No. 33 is now in process of demobilization.

In order that you may be informed of changes in personnel occurring since January 1, 1919, I am inclosing an appendix to the "Chronological List of Changes in Personnel," a copy of which, with the history of this organization, I believe, was furnished you by Colonel Corning. This will finish the record of Base Hospital No. 33, as it is expected that demobilization will be completed by March 5th.

I believe that the record made by this organization has justified the interest and generosity which the people of Albany and vicinity showed in equipping and organizing it and am sure that every member of its personnel feels deeply grateful for the opportunity for service thus afforded.

Very truly yours,

CLINTON B. HAWN.

APPENDIX

Chronological List of Changes in Personnel.

January 10, 1919—Capt. JOHN F. SOUTHWELL, M. C., U. S. A., relieved from duty this command and returned to the United States.

January 13, 1919—Lt. HARVEY M. WATKINS, M. C., U. S. A., relieved from duty this station.

- January 13, 1919—Lt. CARLTON J. WELLBORN, M. C., relieved from duty this station.
- January 14, 1919—Capt. LEMUEL W. GORHAM, M. C., U. S. A., relieved from duty this command and returned to the United States.
- January 14, 1919—Capt. FREDERICK W. MCSORLEY, M. C., U. S. A., relieved from duty this station.
- January 14, 1919—Capt. HENRY R. VIETS, M. C., U. S. A., relieved from duty this station.
- January 14, 1919—Lt. ROBERT A. MACTAGGART, M. C., U. S. A., relieved from duty this station.
- January 16, 1919—Capt. ROBERT J. CHILDERS, M. C., U. S. A., relieved from duty this station.
- January 16, 1919—Capt. ROBERT M. COLEMAN, M. C., U. S. A., relieved from duty this station.
- January 16, 1919—Capt. CLARENCE F. GRAHAM, M. C., U. S. A., relieved from duty this station.
- January 16, 1919—Capt. DANIEL G. SMITH, M. C., U. S. A., relieved from duty this station.
- January 18, 1919—Capt. JOHN L. EDWARDS, M. C., U. S. A., relieved from duty this station.
- January 18, 1919—Capt. EDWIN L. DRAPER, M. C., U. S. A., relieved from duty this station.
- January 29, 1919—Lt. CHARLES H. DOE, M. C., U. S. A., relieved from duty this station.
- February 4, 1919—Capt. FRANCIS H. WISEWELL, Eng., relieved from duty this station.
- February 4, 1919—Lt. Col. ERASTUS CORNING, M. C., U. S. A., relieved from duty this station.
- February 6, 1919—Capt. MALCOLM DOUGLAS, M. C., U. S. A., relieved from duty this station.
- February 11, 1919—Lt. FRED K. KRENZ, Eng., relieved from duty this station.
- February 12, 1919—Lt. FLORENCE A. DONOHUE, Q. M. C., left at Portsmouth, Eng.

Nurses.

February 7, 1919—The following Nurses left this station, reporting to Commanding Officer, Savenay, France, for further duty:

Nurses, A. N. C.

VAN AMBURG, HOLDRED.

Reserve Nurses, A. R. N. C.

BUTLER, KATHRYN	KELLY, ELEANOR M.
CHAPMAN, EDITH L.	LANE, SARA
DUBOIS, GRACE M.	LEE, MABEL L.
FALMAN, MINNIE L.	MACLEAN, HAZEL A.
HOFFMAN, WILHELMINA T.	MOFFETT, D. AMELDA
HUGHES, STELLA M.	OLDFORD, VIOLA
KEARNEY, CATHERINE A.	TIFFANY, FLORENCE C.
YARD, LILLIAN L.	

February 7, 1919—Civilian, MARSHALL, MAUD J., left this station, reporting to Commanding Officer, Savenay, France, for further duty.

Enlisted Men.

January 9, 1919—Pvt. REARDON, PAUL J., M. D., returned to duty this command from Base Hospital No. 40, Sarisbury Court.

January 18, 1919—Pvt. 1/c. BOMBARD, JOSEPH A., M. D., and Pvt. 1/c. DEGNAN, THOMAS C., M. D., relieved from duty this command. Transferred to Elysee Palace Hotel, Paris, France.

January 26, 1919—Pvt. 1/c. YOUNG, ARCHIE S., M. D., relieved from duty this command. Transferred to Embarkation Officer, Liverpool, England, for transfer to the United States.

February 4, 1919—Hosp. Sgt. DINES, FRED C., M. D., relieved from duty this command. Transferred to H. Q., Base Section No. 3, S. O. S., American E. F., London, England.

February 10, 1919—Pvt. 1/c. CROES, PETER G., M. D., and Pvt. 1/c. VENEAR, 644051, STEPHEN A., M. D., relieved from duty this command. Transferred to N. R. E. F. (Russia).

February 12, 1919—Sgt. 1/c. MEATON, ERNEST J., M. D., Sgt. BRIGGS, WILLIAM H., M. D., Sgt. WAIT, LORENZO C., M. D., Sgt. BRONK, HAROLD R., M. D., Pvt. k/c. COOK, HAROLD R., M. D., Pvt. 1/c. SACKETT, STANLEY, M. D., left at Portsmouth, England.

February 12, 1919—Pvt. 1/c. ALBERT, JOSEPH H., M. D., and Pvt. 1/c. HOLCOMB, JOHN H., M. D., transferred to Ship's Hospital aboard "S. S. Olympic."

February 23, 1919—Pvt. 1/c. FALCONER, HAROLD A., M. D., and Pvt. 1/c. NEUBAUER, MILTON, J., M. D., transferred to Ship's Hospital aboard "S. S. Olympic."

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF FEBRUARY, 1919.

Consumption	16	Bright's Disease	8
Typhoid Fever	1	Apoplexy	13
Scarlet Fever	0	Cancer	13
Measles	0	Accidents and Violence	10
Whooping Cough	0	Deaths under 1 year.....	11
Grippe	31	Deaths over 70 years.....	32
Diarrheal Diseases	0	Death rate	20.42
Pneumonia	9	Death rate less non-residents	18.44
Broncho Pneumonia	11		

Deaths in Institutions.

	Non-res.	Res.		Non-res.	Res.
Albany Hospital	6	12	Maternity Hospital	0	2
Albany Hospital Camp .	0	4	St. Margaret's House ...	1	1
Albany County Hospital	2	0	St. Peter's Hospital ...	4	9
Albany Co. Penitentiary	1	0		—	—
Child's Hospital	2	0		20	42
Homeopathic Hospital ..	1	8			
Home for Aged	1	6	Births		163
Public Places	2	0	Still Births		4

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	3	Mumps	27
Scarlet Fever	4	Pneumonia	64
Diphtheria and Croup	20	Influenza	569
Chickenpox	33	Puerperal Septicaemia	1
Smallpox	2	Epidemic Cerebro-spinal	
Measles	28	Meningitis	1
German Measles	0		—
Whooping Cough	8		779
Tuberculosis	19		

Number of days quarantine for scarlet fever:

Longest..... 35 Shortest..... 30 Average..... 31 3/5

Number of days quarantine for diphtheria:

Longest..... 18 Shortest..... 10 Average..... 12 2/5

Fumigations: Rooms..... 239 Buildings..... 40

Milk bottles disinfected 474

Communicable Diseases in Relation to Schools.

	Reported D. S.F. M	
Public School No. 1.....	I	
Public School No. 2.....		5
Public School No. 7.....		6
Public School No. 14.....	I	
Public School No. 15.....		I
Public School No. 16.....	I	15
Christian Bros. Academy	I	

Miscellaneous.

Cards posted for communi- cable disease	45	Postal card returns received from doctors	12
Cards removed	12	Inspections and reinspections	48
Notices served on schools...	99	Vaccinations	40
Notices served on stores and factories	11	Vaccination dressings	62
Postal card returns sent to doctors	45	Children examined for em- ployment certificates	14
		Number of employment cer- tificates issued	13

Tuberculosis.

Living cases on record February 1, 1919.....		887
Cases reported:		
By card	17	
Dead cases by certificate	3	20
		<hr/>
		907
Dead cases previously reported	14	
Dead cases not previously reported.....	3	
Removed	4	
		<hr/>
Unaccounted for	10	31
Living cases on record March 1, 1919.....		876
Total tuberculosis death certificate.....		17
Non-resident deaths		2
Resident deaths		15
Visits to cases of tuberculosis		64
Miscellaneous visits		2
		<hr/>

LABORATORY REPORT.

Diphtheria.

Initial Positive	37	Unsatisfactory	15
Initial Negative	227		
Release Positive	22	Total	406
Release Negative	105		

Sputum for Tuberculosis.

Positive	38	Negative	85
		Total	123

Widals.

Positive	2	Negative	9
		Total	11

Meningococcus.

Positive	3	Negative	1
		Total	4
Wassermann tests	191	Miscellaneous examinations.	14
Milk analyses	68		
Water analyses	4	Total examinations	821

DIVISION OF SANITATION.

Complaints	40	Resinspections	50
Inspections	38	Plumbing	18
Plumbing	15	Sanitary	32
Sanitary	23		

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections	56	Houses tested	4
Old houses	53	Houses examined	31
New houses	3	Re-examined	71
Permits issued	32	Valid	23
Plumbing	29	Without cause	8
Building	3	Violations	0
Plans submitted	0		
Old buildings	0		
New buildings	0		

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	10	Cats removed	47
Dogs removed	31		
		Total	88

DIVISION OF MARKETS AND MILK.

Public market inspections...	19	Dairies inspected	0
Market inspections	99	Milk cans inspected	225
Fish market inspections.....	9	Milk cans inspected	225
Fish peddler inspections	0	Lactometer readings	152
Slaughter house inspections.	2	Temperature readings	152
Rendering establishment in-		Fat tests	64
spection	1	Sediment tests	36
Pork packing house inspec-		Chemical tests	14
tions	1	Cows examined	0
Hide house inspections	0	Cows quarantined	0
Milk depots inspected	19	Cows removed	0
Stores inspected	142	Complaints investigated	3

Medical News

BEQUEST TO THE ALBANY MEDICAL COLLEGE.—The Albany Medical College is a beneficiary to the extent of \$500 under the will of Dr. Herman V. Mynderse, who died at his home in Scotia, March 5, 1919. The bequest is made in memory of his father, the late Dr. Barent Mynderse, who was curator of the college several years.

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—REPORT OF MONTH OF MARCH, 1919.—Number of new cases this month, 325; classified as follows: Charity cases, 75; cases, moderate income, 60; metropolitan, 82; prenatal (no charge for calls), 22; dispensary social service, 49; tuberculosis, 37; cases carried from last month, 123. Total number of cases under care during month, 448. New cases classified according to disease: Medical, 131; surgical, 5; obstetrical, (a) prenatal, 22; (b), confinement, 31; (c), maternity, 4; no diagnosis, 5. Disposition: Removed to hospitals, 7; died, 3; discharged cured, 94; discharged improved, 72; discharged unimproved, 1; discharged, other care, 41; to dispensary, 10; number of patients still under care, 122. Cases reported by physicians, 40; metropolitan agents, 60; patients' families or friends, 65; nurses, 18; other sources, 15.

Special Obstetrical Department. (Department being reorganized. No students or doctors on call).—Number obstetricians in charge of cases, 0; number of students in attendance, 0; number of new cases this month, 4; number nursing visits, 0.

Visits for Nurses (all departments).—Number of visits with nursing treatment, 1,259; social service visits, 159; prenatals, 65; tuberculosis visits, 126; other visits, 189; total number of visits, 1,798.

Metropolitan Report.—Number metropolitan calls, 0; checks received for last month's calls.

Dispensary Report.—Number of clinics held, 76; new patients, 125; old

patients, 571; total number of patients treated during month, 696. Classification of clinics held: Prenatal, 3; surgical, 6; nose and throat, 8; eye and ear, 17; skin and genito-urinary, 9; medical, 8; venereal (included in skin), 0; lung, 8; dental, 0; neurology, 4; stomach, 0; paediatrics, 0; gynecological, 7; children, 6; number of ear irrigations, 0; dressings, 0; prescriptions, 260. Operations: Myringotomy, 7; cholesteoma, 1; mercurial treatment, 1; salvasan treatment, 2; circumcision, 1.

S. R. FREEMAN, *Superintendent*.

THE UNITED STATES CIVIL SERVICE COMMISSION announces an open competitive examination for medical assistants, for men only. A vacancy in the Bureau of Chemistry, Department of Agriculture, Washington, D. C., at \$2,000 a year, and future vacancies requiring similar qualifications at this or higher or lower salaries, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

The duties of this position will be to review the statements of therapeutic and curative effects of proprietary medicine; to familiarize oneself with the current therapeutic literature of the various schools of medicine; to assist in the preparation and trial of cases under the Food and Drug Act, etc. Ability to translate foreign medical literature is desirable.

Competitors will not be required to report for examination at any place, but will be rated on the following subjects, which will have the relative weights indicated:

<i>Subjects.</i>	<i>Weights.</i>
1. General education and medical training.....	35
2. Practical or professional experience and fitness.....	45
3. Publication or thesis (to be filed with the application)....	20
<hr/>	
Total.....	100

Under the first two subjects competitors will be rated upon the sworn statements in their applications and upon corroborative evidence adduced by the Commission.

Applicants must show that they have at least an academic degree, that they are graduates from a medical school of recognized standing, and that they have had at least six years' subsequent experience in the practice of medicine or two years' subsequent experience in pharmacological investigations.

If a thesis is submitted under the third subject, it must be of at least 500 words and must present the results of original investigational work on the part of the applicant in some phase of medicine or pharmacology, or be a discussion of any one of the following subjects:

1. What evidence is necessary to establish the therapeutic value of a drug preparation?
2. What is the value of the "patent" medicine?

3. What are the principles of the treatment of disease?

Applicants will be admitted to this examination regardless of their age, but at the request of a department making appointments certification will be made of eligibles who are within reasonable age limits.

Applicants must submit with their applications their unmounted photographs, taken within two years, with their names written thereon. Proofs or group photographs will not be accepted.

Applicants will be admitted to this examination regardless of their residence and domicile; but only those who have been actually domiciled in the State or Territory in which they reside for at least one year previous to the examination, and who have the county officer's certificate in the application form executed, may become eligible for permanent appointment to the apportioned service in Washington, D. C.

This examination is open to all male citizens of the United States who meet the requirements.

Applicants should at once apply for Form 2118, stating the title of the examination desired, to the Civil Service Commission, Washington, D. C.; the Secretary of the United States Civil Service Board, Customhouse, Boston, Mass., New York, N. Y., New Orleans, La., Honolulu, Hawaii; Post Office, Philadelphia, Pa., Atlanta, Ga., Cincinnati, Ohio, Chicago, Ill., St. Paul, Minn., Seattle, Wash., San Francisco, Cal.; Old Customhouse, St. Louis, Mo.; Administration Building, Balboa Heights, Canal Zone; or to the Chairman of the Porto Rican Civil Service Commission, San Juan, P. R.

Applications should be properly executed, excluding the medical certificate, and must be filed with the Civil Service Commission, Washington, D. C., with the material required, prior to the hour of closing business on May 13, 1919.

TERMINATION OF WAR ACTIVITIES OF GENERAL MEDICAL BOARD.—In view of the termination of the war activities of the General Medical Board and Medical Section of the Council of National Defense, Secretary of War Newton D. Baker, who, as Chairman of the Council, appointed the members of the General Medical Board, has written a personal letter to each of the seventy-five prominent physicians and surgeons comprising the Board, expressing appreciation for their services and thanking them on behalf of the government. Dr. Franklin Martin, Chairman of the General Medical Board, has also written thanking the members of the State and County Committees which for two years have worked under the direction of the Board.

"In terminating the relations between these organizations and the officials with whom they co-operated and worked so effectively," said Dr. Martin, "while one cannot complain that the war is over, yet a feeling of regret must inevitably arise at the severing of such close connections en-

gendered by the friendship and comradeship that are the natural outgrowths of such important associations."

Secretary Baker's letter :

WAR DEPARTMENT.

WASHINGTON.

My Dear Doctor:

Dr. Franklin Martin advises me that the work of the General Medical Board of the Advisory Commission of the Council of National Defense is now nearing completion and that the board will be dissolved on April 1st.

I cannot permit the occasion to pass without expressing my grateful appreciation of the work which you have done and the singleness of spirit with which your associates and yourself have devoted themselves to the great work which was placed in the hands of the General Medical Board of the Council of National Defense. While it would be invidious to make any appraisal of the work of your board in comparison with that of any other agency organized in the emergency, I need not, I know, assure you that the government appreciates deeply and genuinely the great and essential contribution which has been made by the Medical Board in the mobilization of the civilian profession, its classification as to specialties and fitness, and in the preparation and organization of information which would enable the Department to secure from the manufacturers of the country the vitally necessary instruments and supplies for the medical care and attention of our men in the field.

Since the cessation of hostilities the work of the Board has been rounded out to completion. I beg you to accept for yourself and your associates this expression of my deep appreciation of the service which you have rendered to the country.

Cordially yours,

NEWTON D. BAKER.

Secretary of War.

Dr. Martin's letter to the members of the State and County Committees :

COUNCIL OF NATIONAL DEFENSE.

WASHINGTON

MARCH 25, 1919.

From: Chairman, General Medical Board, Council of National Defense.

Subject: Termination of War Activities.

Upon the signing of the armistice on November 11, 1918, the strenuous war time activities of the committees of the Medical Section of the Council of National Defense automatically ceased. As the unfinished business in the hands of the committees at that time is now approaching completion, you are hereby notified of the termination of your war duties as a State Committeeman on April 1, 1919.

Not until the history of our part in the great war is written will the people realize the important role the medical profession of the United States played in making our country a deciding factor in winning the war. Do you realize that in the year before our entry into the conflict the commissioned officers in the Medical Departments of the Army and the Navy numbered less than five hundred in each service and that practically 40,000 civilian doctors had been added to these two Corps by the time hostilities had ceased? When the story is told of the enrollment of these thousands of doctors, it must give the largest credit to our many state and county committees who labored so patriotically and continuously to carry out the recommendations of the organization under which they worked, the Council of National Defense, and thus aided the administrative departments of the Surgeons General of the Army, the Navy, the Public Health Service and the Provost Marshal General.

The work of these committees under the direction of the General Medical Board had to do with activities of which the following is a brief summary: Recruiting medical officers; standardization of medical and surgical supplies; cooperation in controlling venereal diseases; mobilizing five thousand dental surgeons; establishing committees on hygiene, sanitation, general surgery, orthopedic surgery, ophthalmology, otology, rhinology, and laryngology, general medicine, nursing, women physicians and medical schools; organizing medical advisory boards; the study of industrial medicine; securing through legislation increased rank for reserve medical officers; and finally, individual classification of the members of the profession through the medium of the Volunteer Medical Service Corps.

I want you to know that those of us who have had the responsibility of organizing and enrolling the medical profession and resources appreciate the value of your work and thank you for it from the bottom of our hearts. This includes the Secretary of War, who presides over the Council of National Defense, the Secretary of the Navy, who is one of its members, and the President of the United States, who appointed the Council, and on two occasions has said, in speaking of our state and county committees: "Will you not be kind enough to convey to them a message of sincere appreciation from me of their services as authorized governmental agencies? . . . The health of the Army and the Navy and the health of the country at large is due to the cooperation which the public authorities have had from the medical profession."

Finally, in sending this communication to you after our two years of stressing work together, I want to thank you personally for your ever prompt response to my calls for help and for the evidence you have always shown me of your loyalty, fidelity and friendship.

Yours very truly,

FRANKLIN MARTIN.

Chairman, General Medical Board, Council of National Defense.

THE COUNCIL OF NATIONAL DEFENSE authorizes the following:

Characterizing the work of the Volunteer Medical Service Corps and the Medical Section of the Council of National Defense as "a very striking demonstration of the American spirit," Dr. Edward P. Davis, president of the Corps, paid tribute to the patriotism of American civilian doctors at the final meeting of the Central Governing Board of the Corps held in Washington March 14th, prior to the termination of its war time activities April 1.

A report submitted at the meeting showed that nearly 70,000 applications have been received from physicians for membership in the Corps, of which 56,540 had been received and coded prior to the signing of the armistice, November 11, 1918. Qualifications of these civilian doctors, classified and coded on cards, will be placed in the Library of the Surgeon General of the Army, where they will be accessible to all governmental departments for all time to come. With the approximately 40,000 medical officers additional, who are in the Army, Navy and Public Health Service, practically all the able-bodied, eligible doctors of the country will be listed, available for the nation's needs. Usually there are said to be about 150,000 physicians in the United States, but this total includes a large proportion of superannuated, disabled or ineligible.

Dr. Franklin Martin, Chairman of the General Medical Board of the Council of National Defense, expressed his warm appreciation of the co-operation he has received from the medical profession of the country and his firm belief in the value of the records of the Volunteer Medical Service Corps.

Dr. Davis said, in part: "This Volunteer Medical Service Corps and the work of the Medical Section of the Council of National Defense has been a very striking demonstration of the American spirit in more ways than we have imagined. I have always thought of a remark made by the President when the whole thing was in full swing, just about the time the nation had gotten its stride. He said that the men who were staying in this country were having the hardest time. That was true. You take the medical men who actually went into service. Of course, some of them did office work in Washington, but the men whom I know who have been in the camps here—whether they got to Europe or not—say they have had the time of their lives.

"One man, my assistant, said: 'I am just coming back from a year's freedom from responsibility, except for the immediate performance of my duties.' Another man, who is probably the best X-Ray man in the Army, said his career in the Army has been the happiest time he has ever known, because he has worked scientifically without interruption. They had the privilege of being free to concentrate their minds on duty, and I think the remark made by Dr. Studdiford in New York the other night is to the point—that there has not been in the past year in the prac-

tice of medicine in the United States one single easy, pleasant, satisfactory thing. He said he hoped he would never have to live to go through another such year.

"When you consider the burden thrown upon the profession of this country by the shortage of resident membership, taking away assistants, nurses, laboratory men; the influenza epidemic, with the consequent increase in morbidity and mortality, and the strain upon the population which is now showing itself—it has been a most hectic war season. I don't think any profession has met a similar crisis in civilization as nobly as did the American profession, and no small part of the moral value and success of the profession was due to this Corps. The fact that we had a Corps where the men could record themselves who did not go to the front had an enormous moral value.

"I personally desire to testify to the pleasure it has been for me to do what I have done. And I have sincerely appreciated the honor which has been given to me."

To about 13,000 doctors whose applications for membership in the Volunteer Medical Service Corps had been received before the armistice was signed but which had not been acted upon by their state committees, now dissolved, Dr. Davis is sending the following letter:

From: Volunteer Medical Service Corps, Council of National Defense.

To: Applicants for membership.

1. With the cessation of hostilities subsequent to the signing of the armistice, the Council of National Defense, under which the Volunteer Medical Service Corps was organized, asked that the activities of that Corps be terminated, and Surgeon General Ireland of the Army requested that the valuable records of the Corps be given place in the Library of the Surgeon General where they will be maintained permanently for reference by the various Government bureaus.

2. Your application for membership in this Corps, we regret to say, was not acted upon by your State and County Committees before those Committees were automatically released and, therefore, we are unable to complete your membership by furnishing you with the visible evidences of your tender of service, viz., the insignia and certificate of the Corps. We wish you to know, however, that your patriotic offer of service to your Government has been received and your qualifications as outlined on the Volunteer Medical Service Corps application blank have been transferred to permanent code cards which are to be preserved as an important record of the war.

3. We also wish you to know that those of us who have had the responsibility of organizing and enrolling the medical profession of the country appreciate the value of your offer of service and thank you for it from the bottom of our hearts. This includes the Secretary of War, who presides over the Council of National Defense which authorized the Volunteer Medical Service Corps; the Secretaries of the Navy, the In-

terior, Agriculture, Commerce and Labor; the members of the Council, and the President of the United States, who appointed the Council of National Defense and who definitely approved the Volunteer Medical Service Corps in the following words: "I am very happy to give my approval to the plans which you have submitted, both because of the usefulness of the Volunteer Medical Service Corps and also because it gives me an opportunity to express to you, and through you to the medical profession, my deep appreciation of the splendid service which the whole profession has rendered to the Nation with great enthusiasm from the beginning of the present emergency."

4. Finally, may I express to you on behalf of the Central Governing Board of the Volunteer Medical Service Corps its personal thanks for your generous response to its request for an offer of your services at a time when it appeared they would be so urgently needed by the nation.

EDWARD P. DAVIS, M. D.

President, Volunteer Medical Service Corps.

PERSONAL.—PROMOTION OF MAJOR L. H. GAUS.—Major Louis Herbert Gaus (A. M. C., '07), commanding the 106th Field Artillery, formerly the Second Field Hospital of Albany, has been promoted by General Pershing on February 19, 1919, to lieutenant colonel. The 106th Field Hospital is part of the Twenty-seventh Division and is expected to arrive in the United States soon.

Lieutenant Colonel Gaus was made lieutenant of the first ambulance company in Albany, of which Dr. Joseph Cox was captain, in November, 1911. Captain Cox became ill and was forced to give up the command and Lieutenant Gaus was promoted to captain in his place. He was named major March 27, 1917, and Lieutenants Philip Hacker and George Papen were appointed on his staff.

The unit was mobilized in June, 1916, and sent to Fort McAllen, Texas. Returning in December, the unit remained in the armory for two days and was mustered out.

When the United States entered the world war the unit was ordered to Newport News, when it sailed for France.

—Dr. FREDERICK W. MCSORLEY (A. M. C., '09) has been promoted from the rank of captain to that of major, M. R. C. Dr. McSorley gave up his practice in Salem, N. Y., in June, 1917, and entered action as a first lieutenant, M. C., at Fort Niagara, N. Y. In December, 1917, he was transferred to Base Hospital 33 when mobilized in Albany, N. Y. In May, 1918, he sailed with this organization, and served with it in Portsmouth, England, until January, 1919, when he was sent to the U. S. Army of Occupation, where he is now serving as assistant chief of medical service in the largest base hospital in the Army of Occupation, located at Treves, Germany.

ALBANY MEDICAL ANNALS

Original Communications

THE SHELL-SHOCK WARD.

By JOHN CHAPIN MOSHER,

Albany, N. Y.

Foreword: I am calling it "shell-shock" although the term is not allowed in army reports and has no medical authority; and many of the cases on the ward were nerve wounds or men with nervous difficulties not traceable to the firing line. But this is the name under which the ward was known in the hospital, and in America it seems to be the most general and most popular term for all the complex mental disorders that the war brought upon the men overseas.

For three months this last fall I was an orderly on "A 1," the "shell-shock" ward at Base Hospital 33, Portsmouth, England. These letters were scrawled in casual chance moments at a time when fits and attacks of all sorts were the normal occurrences of every day and when it seemed altogether artificial to consider them as any extraordinary demonstrations to be particularly recorded. Many of these letters may seem flippant. I suppose it is inevitable that one cultivate a certain callousness when distress is such a common thing. Otherwise life would be unendurable, and we ourselves more useless than the sick. Men who have been on the line understand this a thousand times more clearly. But I am not altering the character of these notes in any way—they are just as I wrote them those arduous days; that is as much a part of the story they have to tell, as the facts they give.

September 16.

I know you will be interested in Captain Viets' ward — the shell-shock ward. It's run, run, run, and fit, fit, fit, from 7 a. m. to 7 p. m. Sackett and I are "on" days, and Terry McGovern, a big Irish boy, and Cook, "on" nights. But these last few days I've had it pretty much all on my own hands, since Sackett was knocked out by a patient who went on the rampage the other day and flew at every one in sight. More of that later. We also have some T. B.s on the ward but they are not especially interesting, being just sick, you know.

As everywhere else I guess, it's food and feeding that takes up most of our time. We serve thirty-five men on the ward, including six or seven trays. The non-tray or "up" patients line up with their plates, bowls and cups — Sackett and I serve them — and they carry the stuff to long tables, all of us arguing, shouting over sugar and butter and "seconds," and there's generally one epileptic fit as a set-off. They get the same food we do; meat and potatoes and greens and tea make perhaps the best meal, and again like tonight's supper, we'll have soggy macaroni and apple sauce that looks like shoe polish.

Every morning at nine the captain makes his rounds, "the royal procession," one nurse and Sackett and I following with notes and records and blanks. It's done in military form of course, all the patients who can standing "at attention," and the others sitting with at least an expression of "at attention."

Twice a week Captain Viets has private talks in his office with the patients, and he has allowed me to come to some of these. He made one man write out and read to him the story which he dreams every night over and over, which he cannot forget — of that scene on the front when a lieutenant who had been an intimate friend of his in civilian life, had his whole side torn away by a shell. He dreams of the body turning black and of the screaming of the wounded horses. We must be careful with this man, not to slam doors near him, or rattle dishes. Once I had to wake him when he could not have been dozing for more than ten minutes, and he started up with wild eyes, and with a terrible convulsive twitching of his fingers. Another little fellow, a New York Jew with the *croix de guerre*, dreams every night that he

is going over the top, although in the daytime he is quite normal and cheerful. Another distraught, quivering boy who looks over ninety dreams every night that terrible dream of being chased and of not being able to move, and always he feels in his chest the bayonet of a German prisoner he had once seen. One boy came to us having slept for nine days, but after two with us he woke up coolly, and now is quite an ordinary being.

Our most energetic patient, the man who knocked out Stanley, roused himself after two calm, undiagnosed days and hit a man over the head with a Victrola record. He calmed down until midnight when without any warning he jumped on the man in the next bed and almost strangled him. For the rest of the night Cook sat on guard at his feet, while he bolstered himself straight up, his eyes glaring through the dark, making a queer clicking noise with his teeth. Next morning he could hardly endure lying still, and of course at the first opportunity he slid out of bed. There was a riot. He leaped across the room at me — I have never seen anything so quick in my life — he was like a steel spring. All the men ran at him. He was thrown down on his bed with about ten men on top of him. One excited infantryman got in an awful sidewhack too. You can imagine how this upsets the whole ward. Some of the men say they would rather be at the front. At last we put him in a private room, but he appeared just as we were serving mess, and stood a threatening figure at the end of the corridor, and the whole ward cowered as he demanded to be taken to the bathroom. At the end he had to be tied down in bed. First though he managed to get in a nasty dig at Sackett, catching him in an unwary contemplative mood. Poor old Stan is slowly recovering, formally on the sick list and wondering if he doesn't get a wound stripe.

Another of our coterie has tried to commit suicide three times, and must never be left alone a moment. First he stabbed himself with a tent peg, then slashed his throat with a safety razor blade, and just the other day tried to chop open his skull with the steel heel of his trench shoe. This last business happened at noon mess, and as usual started off the whole ward. The only patient to see anything of the mix-up was one epileptic who strolled to a quiet corner of the courtyard, and fell in a fit; this

brought on an attack of the same sort in another boy, which in turn caused one highly sensitive patient to faint. And generally disturbed several others. All in a matter of ten minutes. Then we all had dinner.

These epileptics are very sad boys. One of them, a Tennessee farmer, runs an average of three attacks a day, generally at mess time; the excitement of the crowding together of thirty men is too much for him. And the draft boards planned to send him to the trenches! It's heart-breaking; he is so strong otherwise. But they will send him back soon I think, to his wife and his two children — he was married at sixteen. Besides these patients our personnel includes two prisoners who have their special guard, a marine with an old wound in his arm and an ex-top sergeant, the mental case, who reads theosophy all day and explains to Captain Viets the negatives and positives of the spirit. Otherwise he avoids sedulously all contact with the men around him. One other boy never speaks, he is so haunted by the suspicion that we are all conspiring to poison him, but he plays the violin delightfully, and entertains the whole ward with "Dancing on the Levee" and "Over There." Between the prisoners and their guard, and the suicide and his guard, and the epileptics and the shell shocks, we are already winning a certain notoriety.

As for us, we practically live on the ward. We have an old padded cell (you know, this was an insane asylum before the Americans took it over) and we sleep there on mattresses thrown on the padded floor. It's better than the tents these wet, windy nights.

P. S.—To illustrate how trivial a circumstance can disorganize the peace of the ward: Yesterday the Duke of Connaught visited the hospital, and though the men in A 1 only saw him from a distance, the event of his royal presence gave one epileptic an attack, with its usual sequence throughout the ward.

October 13.

Some easing up of the work here lately. No fits. Monday one man slipped away from his guard, ran around the hedge of the courtyard, jumped into the Red Cross captain's automobile. The captain was scared to death, though the boy just sat beside

him and stared fixedly ahead. And the driver lost his wits, and ran the car into the ditch. An orderly arrived just in time to calm their alarm, and assure the patient no one would hurt him, if he would return to the ward.

October 26.

Last night they brought in a colored boy, a funny little fellow that the whole ward began to pet at once. He was pretty tired and took his bath and went to bed though without bothering much about anyone. But in the dead silence of midnight, he suddenly began to chant "Come and be saved, oh, all you good Christians, come and be saved — come and be saved." Nobody could sleep through it, and they finally shut him in a private room. This morning he is squatting on top of his bedside table, chanting all his remarks: "No — I don't want any more breakfast. — I wa-ant that piece of sweet bread — sweet white bread," and urging the captain to "co-ome and be saved."

One man looked particularly woe-begone this morning, and at last began to cry. He said he was hungry, though an hour before he had refused to eat any breakfast.

October 29.

A Norwegian here has terrible pains in his head from a shell explosion. But his mind skips the scenes of the front to the day he sailed from America, for just before the transport left the docks he got a telegram that his mother had died, and nothing seems to have impressed him more vividly than that shock. Another youngster — they are such kids, so many of them — is just beginning to get his bearings after a high fever that followed the "flu." When we asked him if he didn't want to send his Christmas package permit home, it developed that he had no idea how to write home — naturally as he had never been away from there before.

Captain Devine, the English superintendent of the asylum in the old days, told me it was not the sensitive, delicately poised mind that suffers the most strain in these times, but rather that of the man of close routine. The most severe experiences of the front he found educated men treating in the light of experience,

adapting themselves to the situation in some such detachment, and bearing up under rotten drudgery with the idea of learning something. I suppose it is a good argument for education, which I am sure needs all that can be found for it in this world. For instance one man has been on the ward for months suffering a sort of neurasthenia. He's a large, bald-headed, middle-aged man who had been post-master in a small middle-west town. All his life he had gone through the same daily program, dealing with the same people in the same way. Naturally he has not been trained to meet any abrupt contingency. Well, he is digging a grave on the front and a shell comes along and blows him in it and buries him. Personally I should think that would have been disconcerting to anyone, even after the most varied existence. Of course it will be months before he is able even to take up that old familiar round of life.

A giant of a lieutenant on the ward can't sleep nights, and all day long he roams the corridor of the ward watching the patients and declaring he'll be as bad as the worst of them before long. He receives quantities of mail which he never opens, storing it all up, he says, until he recovers. He hasn't written to his people in three months.

Here's a letter just come from one of the patients who has been sent back to the States. This boy only had one attack here. He had been sitting in his corner in his usual rigid manner all afternoon; suddenly he opened his mouth and gave one shout, and then settled back in his old calm. The two boys he refers to were the epileptics, "A" the boy who used to have one fit a meal here.

"Dear captin I will rite you a fue lines to let you no how I am getting along. not any better. we left liverpool sunday. just got here last nite Oct. 9—we had only two nice days, the rest of the time was storming. I wish I could see you and "A" told me to tell you he would rather be with you than to be where he is. it is like the pinortenchery here. they keep us locked up all the time. I had 12 spells crossen the sea and "A" had three spells and "C" had two spells. we had to help one another with our spells. there was seven orderlies that come across with the crowd and a mager and a captain and a nurs. we are on Ellis

Island for two or three days. I dont no where we go from here. when I get settled again I will rite you a letter. tell Miss Anna C. Purcell I wish she was here. I would like to see all the nurses. when I get to another hospital will rite to them. I will close for this time hoping to here soon. from your pashen — so long for this time. exuze my ritting I hant a good riter."

Thanksgiving.

This morning our very sick patient died. For these last few weeks he has been our only concern in the ward. He had a bullet through the lungs, and another that still remained in his spinal column. Poor boy, it has been a long difficult dying, although I don't believe he had any idea he would die until very near the end. He liked to be read to; and to have one of us stroke his arm, from a sort of loneliness, I think. He would call out "Read — Rub" and we would read whatever we happened to have around, and rub his arm until he dozed, which he would do very quickly. He never cared what we read, or ever followed it, only objecting to one story because it touched upon the war. Yesterday, the day before he died, two letters (his first mail) came to him, from his mother, and from the girl he was to marry.

Of all the armistice celebration two weeks ago I shall never forget coming into his room, from where, propped up with pillows, he could hear the shouting and the singing in the streets. "They tell me it's peace," he said, "but I don't believe it."

December 5.

We have still about 900 patients in the hospital, though three nights ago we cleared out 400—leaving only twelve in our own ward. It was really a very well handled job, getting them out, not a hitch anywhere, an instance when you understand a need for the meticulous army sense of detail.

We called our men at midnight (in the army you know one always starts on a journey at about three in the morning and gets up four hours before to be ready), got them up, and dressed, had a supper, checked up each man on his clothes, etc., distributed Red Cross candy, and lined them up in alphabetical order. Of course this time they were only too ready to co-operate, only

one boy a bit bewildered, because of seventeen Scotches in the course of the afternoon, we were informed. At the end the captain climbed a bench and wished them bon voyage, whereat they all clapped and started out in single file on their long, long journey home across the Atlantic, headed by an epileptic negro in the "B's."

Correspondence

"THE EVIL THAT HAS BEEN SPOKEN OF PHYSICIANS."

8 Apr. '19.

DEAR MONT.

"By special request," quite a while ago, our friend, Dr. Callamand of St. Mandé, France, sent me a French work whose title translates: "The Evil that has been Spoken of Physicians." It is in two duodecimo volumes, having a total of more than six hundred pages. The editor of the book is Dr. Callamand's personal friend, Dr. Witkowski. It seems as if you might find the translation of some extracts from the work fit for publication in the ALBANY MEDICAL ANNALS. In that case I am sure Dr. Callamand would be glad to read the ANNALS, at least to that extent.

CULVER.

"The physician who pretends to be able to cure diseases of which he cannot cure himself, is an ignoramus and a dishonest man." St. Gregory of Nyssa.

PLAUTUS (250-184 B. C.)

THE MENECHMI.

OLD MAN. "What a violent attack! What frenzy! O gods, save us! Nevertheless, only a moment ago this lunatic was quite sensible. What a terrible illness has suddenly attacked him! Let us get a physician as soon as we possibly can." (*Goes out.*)

SCENE 2.

MENECHMUS, *alone*. "Have they finally gone? These facetious parties who are bound to consider me crazy, altho I am, in reality, perfectly well!"

SCENE 3.

OLD MAN, *coming back*. "I have kidney-pains from sitting still and pain in the eyes from looking, while I wait for the doctor to come back from his calls. The bothersome person! What trouble he has to get thru with his patients. He pretends that Esculapius and Apollo had, one a broken arm and the other a broken leg and that he fixed them both up; when I come to think of it, I wonder if it's a doctor that I'm getting or a doughty smith. Here he comes, walking about as fast as a pismire."

SCENE 4.

THE DOCTOR, *with a grotesquely puffed-up air*. "What disorder is it that you say he has? Repeat, old man, is it mania or frenzy? I would like to know. Is he a victim of lethargy or of dropsy?"

OLD MAN. "That's just what I'm bringing you here to tell me, and to have you cure whichever it is."

DOCTOR. "Nothing easier! I'll cure him, I give you my word for that!"

OLD MAN. "It's a treatment that requires great care, I tell you that!"

DOCTOR. "I'll put myself out of breath six hundred times a day, such care will I take and such earnestness will I show!"

OLD MAN, *pointing out Menechmus, beside himself, who arrives*. "There is your patient!"

DOCTOR. "Let's watch how he behaves."

SCENE 5.

MENECHMUS, *not seeing anybody*. "By Pollux, this day is a mighty unfortunate, very unlucky one, for me. All that I hoped to keep secret has been discovered by this parasite, the author of the trouble and scandal in which I find myself; my perfidious Ulysses, who has caused his king all these chagrins! If the gods spare my life, I'll take his; but when I call it his, I talk like a fool; since it is really my own, inasmuch as it was at my table and at my expense that it was nourished. I'll deprive him of existence. And that courtesan! How thoroly she has acted like those of her sort! Because I beg her to give me the mantle,

in order that I may return it to my wife, she insists that she has already given it back to me. Ah! By Pollux, I am mighty unfortunate!"

OLD MAN. "You hear him?"

DOCTOR. "He is complaining of his illness."

OLD MAN. "Go and talk to him."

DOCTOR. "Greeting, Menechmus! Why do you bare your arm? You don't know how much you make yourself worse, by that!"

MENECHMUS. "Go hang yourself!"

DOCTOR. "Do you feel?"

MENECHMUS. "Parbleu, yes! Of course I feel!"

DOCTOR, *to the Old Man*. "A whole field of hellebore wouldn't be enuf. But say, tell me, Menechmus!"

MENECHMUS. "What do you want of me?"

DOCTOR. "Answer my questions. Do you drink white wine or strong, colored wine?"

MENECHMUS. "Oh! Go to the gibbet, where you'll finish!"

DOCTOR. "His attack is beginning."

MENECHMUS. "Why don't you ask me if I eat red, or violet or yellow bread? or if I nourish myself with birds with scales or fish with feathers?"

OLD MAN. "O heavens! You hear what extravagances he utters! Hurry up and give him some potion, before his illness acquires all its force."

DOCTOR. "Wait a bit; I want to ask him something further."

MENECHMUS. "More yet? You'll kill me with your verbosity."

DOCTOR. "Tell me, do your eyes get hard, habitually?"

MENECHMUS. "Do you take me for a grass-hopper, you imbecile?"

DOCTOR. "Do you sometimes hear your bowels crying?"

MENECHMUS. "When I've had enuf to eat, they don't cry. It's when I'm hungry that they get to crying."

DOCTOR. "By Pollux, that answer isn't that of a lunatic. Do you sleep till morning? Do you go to sleep readily when you go to bed?"

MENECHMUS. "I sleep well when my debts are paid. May Jupiter and all his gods confound you, you accursed questioner!"

DOCTOR. "His folly is beginning again: take care, when it is your turn."

OLD MAN. "Oh! Those things are mild as compared with what he was just saying. He was calling his wife a mad bitch."

MENECHMUS. "*I?* I was using such language as that?"

OLD MAN. "You are demented, I tell you!"

MENECHMUS. "*I?*"

OLD MAN. "Yes, yourself; you have threatened to crush me under a chariot with four horses. That's the kind of extravagances I've known you to be guilty of; that's what I'm telling you!"

MENECHMUS. "And I, I know that you stole his sacred crown from Jupiter; and that, for that, you were thrown into prison; and that you got out of prison only in order to be beaten with rods and to wear the criminal's iron collar; *that* I know. I know, too, that you assassinated your father and sold your mother. Have I ready wit? and have I returned you insult for insult?"

OLD MAN. "I implore you, Doctor, do, as soon as you can, what belongs to your function. Don't you see that he's having an attack?"

DOCTOR. "Do you know what will be better? Have him taken to my place."

OLD MAN. "Is that your advice?"

DOCTOR. "Yes, I can take care of him, there, just as I want to."

OLD MAN. "As you will!"

DOCTOR, *to Menechmus*. "I'll have you drink hellebore for about twenty days."

MENECHMUS. "And *I'll* have *you* hung up and curried for about thirty!"

DOCTOR, *to the Old Man*. "Get somebody that can carry him!"

OLD MAN. "How many will there need to be?"

DOCTOR. "In the demented condition in which I see him, it will take four men,—at least four!"

OLD MAN. "They'll be here in a minute. And meantime, you, Doctor, watch him carefully!"

DOCTOR. "Not on your life! I'm going home, to get ready what is needed. Bid your servants bring him to me, there!"

OLD MAN. "He'll be there, pretty soon."

DOCTOR. "Then I'll go on!"

OLD MAN. "So long!" (*They go out, each at his own side.*)

MENECHMUS. "My father-in-law is gone; the Doctor is gone! Here I am, all alone! Great Jupiter! Why is it that these people are bound to make out that I'm crazy. Since I came into this world I haven't had a single sick day. I'm not crazy and I'm not trying to make trouble or to have a quarrel with anybody. I enjoy perfectly good sense and I regard other people as well behaved; I recognize people and talk with them. But those who pretend that I talk wildly, haven't they, themselves, lost their heads?"

Le Mal qu'on a dit des Médecins.

A grave-digger was burying one of his neighbors and, as he finished his task, noticed, standing by, the physician who had treated the defunct during his last illness. "I supposed you so skillful," he said to the doctor, "that you would cure this man." "I did the best I could for him," answered Medicus, "but this man was quite ill." "If he hadn't been quite ill," queried the digger, "would he have had any need of you?"

HERACLITUS. "If physicians be excepted, there is nothing more foolish in the world than grammarians."

"The surest mark of a low order of civilization and lack of regularity of a people, is to find many judges and doctors among them."

"Plato regarded medicine as being as injurious to individuals as to society generally." "*La Mercure*, February, 1772."

Phaedon gave me neither purge nor massage; yet, having a fever, I tho't of his name,—and here I am, dead!

Socles, having promised to straighten the hunch-backed Diodorus, placed three heavy blocks of stone on the hump of his spinal column. Crushed by their weight, Diodorus died, but he was straighter than he had been.

(One translator (into French) calls this: "The Orthopedist.")

Concerning Dr. Simon:

If you have any enemy, Dennis, don't call down upon him the wrath of Isis nor that of Harpocrates, nor of any divinity, if such there be, that can deprive him of his sight; but Dr. Simon's the one to call in; and you know that Simon can do anything that any god can do.

In performing a surgical operation, Agelaus killed Acestorides. "If he had lived," said the surgeon, "he would have limped."

Dr. Alexis visited five patients; he prescribed alike for all of them, a purge, a drug and massage; and for all five of them there was only one night, one certificate of death, one gravedigger, one tomb and one mourning.

Yesterday Dr. Marcus touched the statue of Jupiter and, although it was marble and despite the fact of it being Jupiter, to-day it has been carried away, like all the rest of his patients.

BERNIER, in his *Essays on Medicine*, tells of how somebody, who sought charity for a physician who had become poor, thought he was making an apt answer, when, upon being asked if the physician no longer had patients to attend, said: "No, he hasn't any more patients; they all died!"

Pausanias was asked how the Thracians could be exterminated: "By putting a physician at the head of the opposing army," he said. In the same way, the author of *Médecins à la censure*, has Sosandre say, in one of his interviews with Cleanthus: "War is called the medicine of the state, because it kills so many."

Once there was a doctor who didn't know his trade. While all the others would say to a patient: "Have courage! You'll get well; the sickness lasts a long time, but we'll beat it!"—this bungler talked to them like this: "You'd better get your affairs straightened out, for you're dying; I don't want to scare or deceive you; but if you should live till to-morrow, you can't last much longer than that!" So saying, he left and didn't come back. Awhile afterward, the patient, who had gotten around, but was still pale and rather shifty on his legs, met the doctor, who greeted him with: "Good morning! How are things going in Hell?" "Oh, everything is very quiet there,—for they drink Lethe water. But lately the great Pluto and his wife were very threatening in their attitude toward doctors who dared to cure their patients. They were making a list of the names of such guilty ones, and your name was among the first on it; frightened as I was by that, I rushed forward, touched their scepter and swore to them that if anybody called you a physician, it was the purest calumny!"

A rustic laughed in his sleeve to see his doctor put on his spectacles in order to examine the money that rusticus had just paid him, and then leave them off while examining the urine that he had brought for the doctor to analyze.

Neither in the deluge of Deucalion, when the earth disappeared under water, nor in the universal conflagration that Phaeton started, did so many persons perish as have been killed by Potamon the poet and Hermogenes the surgeon; so that, since the beginning of time, there have been four great plagues: Deucalion, Phaeton, Hermogenes and Potamon.

Diophanthus having dreamed of Hermogenes, the physician, never got up again, despite the fact that he wore a protective amulet.

Dr. Crateus and Damon, the undertaker, get along nicely as mutual purveyors; Damon steals the shrouds of those whom he buries, and sends them to Crateus, to be used as bandages. And those whom Crateus bandages, he finally puts into coffins and they are sent to Damon for burial.

Editorial

Or do you not see that at Troy they excelled in war, and likewise practiced medicine in the way I mention? Or do not you remember, that when Menelaus was wounded by Pandarus, they

Wash'd off the blood, and soft'ning drugs applied? But as to what was necessary for him to eat or drink afterwards, they prescribed for him no more than for Eurypylus, deeming external applications sufficient to heal men who before they were wounded were healthful and moderate in their diet, whatever mixture they happened to have drunk at the time; but they judged, that to have a diseased constitution, and to live an intemperate life, was neither profitable to the men themselves nor to others, and that their art ought not to be employed on these, nor to minister to them, not even though they were richer than Midas.

You make, said he, the sons of Esculapius truly ingenious.

The Republic of PLATO.



The Alumni Association. The alumni meeting of last year was in every way a success. Anticipations were somewhat lugubrious, for the days of that anxious summer of 1918 were dark days and the terrible suspense of war overshadowed all undertakings. Many of our faculty and graduates were in active service, casualty reports were scanned daily with apprehensive eyes, and, with it all, was the increased burden carried by those at home who bravely added to their own the duties of the absentees. But the spirit which carried some to the camps and over-seas moved others to supreme effort to maintain the industries and institutions at home. This saved the alma mater, and carried it over a threatening crisis to the promise of a brighter day. The officers of the Association, in whose hands rests its fate, spurred by the necessities of the occasion, concentrated their energies upon the alumni reunion, and were rewarded by an attendance and cooperation which resulted in an epoch-making anniversary.

The preliminary announcements of the current year have been likewise encouraging. The response has been general, and the

meeting on June tenth next, promises to excel. The military feature will be conspicuous, and after mutual congratulations and hearty greetings, will take to some extent the character of a victory jubilee. The program of the day will follow that of last year, with some slight modifications suggested by experience.

The provisional arrangement is as follows:

- 9 A. M. General assembly at the college.
- 10 A. M. Annual meeting of the Association.
- 12 M. Inspection of college and decennial class reunions.
- 1 P. M. Luncheon at Country club.
- 3:30 P. M. Clinics at Albany Hospital.
- 8 P. M. Annual dinner at Hotel Ten Eyck.

The purpose of this plan is to engage the attention of visiting alumni for the day, and to make the occasion pleasant and profitable. Those who have not visited the old college building in the last three or four years will find much of interest in the adaptation of the familiar lecture rooms and laboratories to the requirements of recent methods of medical instruction. The face is the face of the ancient form, but the voice is new. There will be time in the forenoon for this renewal of acquaintance with the shrine of bygone years.

A slight change of method in the conduct of the afternoon clinics results from the experience of last year. Instead of a series of short demonstrations following one another, six groups, of surgery, medicine, neurology, gynecology, mental diseases, and the specialties, respectively, will be in action, so to speak, for two hours, leaving the choice of intellectual pabulum to the visitor, who may select one or the other, or more, at his pleasure. The hospital will be open to all.

Of the dinner in the evening it is too early to speak. Post-prandial orators are elusive creatures. It is only possible to announce that the aspirations of the sub-committee on speakers run high. Whether all their hopes are realized or not, present arrangements permit the assurance of an acceptable entertainment.

It is necessary to ask that those who plan to attend will notify the Executive Committee at as early date as the decision is made.

As the reunion promises to be an unusually large one, it is desirable that preparations be made to provide for all. The price of the dinner tickets will be four dollars and of the luncheon one dollar and a half. Every alumnus whose address is on the roll will receive the announcement and program, with a return slip upon which to indicate his preferences. The arduous duties of the entertainment committee will be assisted and the pleasure of the day will be assured by this simple method of cooperation.

Remember the date—JUNE TENTH.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

BUREAU OF VITAL STATISTICS.

DEATHS FOR MONTH OF MARCH, 1919.

Consumption	28	Bright's Disease	12
Typhoid Fever	1	Apoplexy	9
Scarlet Fever	0	Cancer	10
Whooping Cough	1	Accidents & Violence	7
Measles	0	Death under 1 year.....	15
Grippe	35	Deaths over 70 years.....	47
Diarrheal Diseases	3	Death rate	23.12
Pneumonia	21	Death rate less non-residents	20.50
Broncho Pneumonia	11		

Deaths in Institutions.

	Non-res.	Res.		Non-res.	Res.
Albany Hospital	5	11	St. Peter's Hospital	3	6
Albany Hospital Camp..	1	5	Maternity Hospital	0	4
Home for the Aged.....	1	4	Child's Hospital	1	3
St. Margaret's House ..	0	1			
Homeopathic Hospital ..	5	14		22	61
Alms House	5	10	Births		181
Public Places	0	2	Still Births		7
Hospital for Incurables.	1	1			

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	I	Whooping Cough	4
Scarlet Fever	II	Tuberculosis	40
Diphtheria and Croup	9	Mumps	49
Chickenpox	44	Pneumonia	90
Smallpox	0	Influenza	599
Measles	148	Septic Sore Throat	I
German Measles	0	Total	996

Number of days quarantine for scarlet fever:

Longest..... 31 Shortest..... 31 Average..... 31

Number of days quarantine for diphtheria:

Longest..... 35 Shortest..... 10 Average..... 22 3/5

Fumigations:

Rooms..... 219 Buildings..... 97

Milk bottles disinfected 577

Communicable Diseases in Relation to Schools.

Reported
D. S.F. M.

Public School No. 1.....	..	..	9
Public School No. 2.....	..	..	13
Public School No. 3.....	..	..	17
Public School No. 6.....	..	..	4
Public School No. 7.....	..	..	12
Public School No. 14.....	..	..	2
Public School No. 15.....	..	..	2
Public School No. 16.....	..	..	28
Public School No. 20.....	..	..	21
Vincentian Institute .....	..	..	I
Albany Boys' Academy .....	..	..	I
Christian Bros. Academy .....	..	..	I
St. Joseph's Academy .....	..	..	2
St. Ann's School .....	..	..	2

Miscellaneous.

Cards posted for communi- cable disease	93	Inspections and reinspections	98
Cards removed	78	Vaccinations	21
Notices served on schools...	266	Vaccination dressings	32
Notices served on stores and factories	12	Children examined for em- ployment certificates	14
Postal card returns sent to doctors	93	Number of employment cer- tificates issued	13
Postal card returns received from doctors	78	Dogs examined for rabies...	I
		Dogs re-examined for rabies	I

Tuberculosis.

Living cases on record March 1, 1919..... 876

Cases reported:

By card	32	
Dead cases by certificate.....	8	40
		<hr/>
		916
Dead cases previously reported.....	20	
Dead cases not previously reported.....	8	
Removed	6	
Died out of town.....	0	
Recovered	0	
Unaccounted for	2	36
		<hr/>

Living cases on record April 1, 1919..... 880

Total tuberculosis death certificates 40

Non-resident deaths:

Albany Hospital Camp	1	
C. F. L. Pavilion.....	0	
County Hospital	1	
St. Margaret's House	0	
City at Large	0	
Child's Hospital	1	3
		<hr/>

Resident deaths 37

Visits to cases of tuberculosis 56

Miscellaneous visits 14

Physicians visited 6

LABORATORY REPORT.

Diphtheria.

Initial Positive	14	Release Negative	155
Initial Negative	258	Unsatisfactory	10
Release Positive	28		<hr/>
		Total	465

Sputum for Tuberculosis.

Positive	64	Unsatisfactory	0
Negative	80		<hr/>
		Total	144

Widals.

Positive	0	Unsatisfactory	1
Negative	27		
			<hr/>
Total			28

Meningococcus.

Positive	0	Negative	0
			<hr/>
Total			0
Wassermann tests	197	Gonorrhea examinations ...	15
Milk analyses	189	Rabies	1
Water analyses	4	Miscellaneous examinations	1
Pathological examinations ..	0		
			<hr/>
Total examinations			1,044

Division of Sanitation.

Complaints	44	Reinspections	25
Inspections	39	Plumbing	4
Plumbing	7	Sanitary	21
Sanitary	32		

HEARINGS.

Hearings	0
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DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections	81	Smoke	0
Old Houses	80	Blue or red	0
New Houses	1	Peppermint	1
Permits issued	55	Water test	6
Plumbing	46	Houses examined	15
Building	9	Re-examined	71
Plans submitted	31	Valid	5
Old buildings	23	Without cause	10
New buildings	8	Violations	0
Houses tested	7		

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	9	Cats removed	65
Dogs removed	56		
			<hr/>
Total			130

DIVISION OF MARKETS AND MILK.

Public market inspections ..	20	Milk cans inspected	84
Market inspections	96	Milk cans condemned	0
Fish market inspections	9	Lactometer readings	96
Fish peddler inspections	0	Temperature readings	96
Slaughter house inspections.	2	Fat tests	61
Rendering establishment in-		Sediment tests	28
spections	0	Chemical tests	4
Pork packing house inspec-		Cows examined	84
tions	0	Cows quarantined	0
Hide house inspections	0	Cows removed	2
Milk depots inspected	12	Complaints investigated	0
Stores inspected	175	Milk Houses inspected	8
Dairies inspected	8	Bob veal condemned	120 lbs.

Society Proceedings

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.

REGULAR MEETING, THURSDAY, JANUARY 23, 1919.

The meeting was called to order by Dr. Charles H. Moore. Thirty-five members were present. The minutes of the last regular meeting were read and approved. Dr. Luther Emerick of Saugerties, president of the Third District Branch, visited the meeting. The President appointed the following committees:

Legislation: Dr. James F. Rooney, chairman; Dr. William G. Lewi, Dr. Edgar A. Vander Veer.

Public Health: Dr. Henry L. K. Shaw, chairman; Dr. Joseph P. O'Brien, Dr. Clinton P. McCord.

Milk Committee: Dr. Thomas W. Jenkins, chairman; Dr. Ellis Kellert, Dr. F. J. Williams, Dr. Fred N. Bibby, Dr. John S. McCormick, Mr. John F. Miller (Advisory).

Publication: Dr. Charles H. Moore, chairman; Dr. Arthur J. Bedell, Dr. Howard E. Lomax.

Scientific Program

The following program was presented:

Report of a Case of Thrombosis of the Cavernous Sinus, Eugene E. Hinman, M. D.

Laboratory Work in the Army, Thomas W. Jenkins, M. D.

The papers were discussed by Dr. LaSalle Archambault, and Dr. James F. Rooney, and Dr. A. J. Bedell.

REGULAR MEETING, TUESDAY, FEBRUARY 11, 1919.

The meeting was called to order by Dr. Charles H. Moore.

Scientific Program

Diseases of the Chest affecting Men in the Army, Joseph P. O'Brien, M. D.

Lessons to be Learned from the Army in the Diagnosis of Heart Diseases, Nelson K. Fromm, M. D.

Experiences as Chief of the Surgical Service of Debarkation Hospital No. 51, Gerald Griffin, M. D. (by invitation).

Discussion led by Dr. Leo H. Neuman.

SPECIAL MEETING, MARCH 4, 1919.

A special meeting was called on March 4, 1919, by the Comitia Minora for the purpose of considering the question of compulsory health insurance and other matters pertaining to public health now pending in the Legislature.

Dr. Charles H. Moore called the meeting to order at 8:30 p. m.

Dr. James F. Rooney, chairman of the Legislative Committee; Senator Frederick M. Davenport, Assemblyman Clarence F. Welsh, Dr. John M. Andrews, and Dr. James H. Mitchell, of Cohoes, discussed the compulsory health insurance bill.

Dr. James H. Mitchell, of Cohoes, moved that the Albany County Medical Society go on record as being unanimously opposed to compulsory health insurance in any form. The motion was seconded, and carried unanimously.

A vote of thanks was tendered Assemblyman Welsh, Senator Davenport, and Dr. Andrews for their response to the invitation extended and their part taken in the discussion.

Forty members were present.

REGULAR MEETING, MARCH 18, 1919

Dr Charles H. Moore called the meeting to order at 8:30 p. m., and directed the Secretary to read the minutes of the January meeting, which were corrected and approved.

The scientific program of the February meeting reported.

The minutes of the special meeting held Tuesday, March 4th, corrected and approved.

Dr. Thomas H. Halstead, president of the Medical Society of the State of New York, addressed the Society concerning the unanimous opposition to the compulsory health insurance bill which is being manifested by the various county societies of the State.

Dr. James F. Rooney, chairman of the Legislative Committee, spoke concerning the amendments to the bill as it then stood.

Dr. James H. Mitchell, of Cohoes, was elected Vice-President to succeed Dr. Sabin.

Scientific Program

Dr. Shaw gave an interesting review of his work as Army Intelligence Officer, and told of the many phases of his work regarding the apprehension of propagandists, slackers, and spies, and the results obtained by the friends of the Department, and others, in sustaining the morale of the men.

Drs. Hinman, Jenkins, Rooney, and Halstead discussed the paper.

Thirty-six members were present.

Meeting adjourned at 11 p. m.

REGULAR MEETING TUESDAY, APRIL 8, 1919.

The regular monthly meeting was held on Tuesday, April 8th.

The meeting was called to order at 8:30 P. M. by Dr. Charles H. Moore.

The minutes of the last regular meeting read and approved.

Under the reports of committees. Dr. James F. Rooney, Chairman of the Legislative Committees, spoke concerning the further amendments to the compulsory health insurance bill.

Dr. A. G. Root, moved that the Society, through its Secretary, send a letter of condolence to the family of the late Dr. Frank Van Fleet. The resolution was adopted.

Scientific Program

Base Hospital No. 33, Clinton B. Hawn, M. D.

Field Hospital Work in Europe, Clarence E. Mullens, M. D.

A discussion followed by Dr. Rooney and Dr. Fromm.

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—STATISTICS FOR APRIL, 1919.—Number of new cases, 311; classified as follows: Charity cases, 75; cases, moderate income, 60; metropolitan, 96; prenatal (no charge for calls), 26; dispensary social service, 28; tuberculosis, 26; cases carried from last month, 122; total number of cases under care during month, 433. New cases classified according to disease: Medical, 121; surgical, 19; obstetrical—(a) prenatal, 26; (b) confinement, 31; (c) maternity, 6; no diagnosis, 9. Disposition: Removed to hospital, 4; died, 7; discharged cured, 87; discharged improved, 78; discharged unimproved, 1; discharged to other care, 40; to dispensary, 5; number of patients still under care, 131. Cases reported by: Physicians, 34; metropolitan agents, 68; patients' families or friends, 73; nurses, 19; Home S. S. Dept., 3; other sources, 7; dispensary, 8.

Special Obstetrical Department.—Number of obstetricians in charge, 0; number of students in attendance, 0; number of new cases this month, 3; number of nursing visits, 0.

Visits of Nurses (all departments).—Number of visits with treatment, 1,237; number of social service visits, 218; number of prenatal visits, 69; number of tuberculosis visits, 161; number of other visits, 251; total number of visits, 1,936.

Metropolitan Report.—Number of metropolitan calls, 496.

Dispensary Report.—Number of clinics held, 80; number of new patients, 94; number of old patients, 400; total number of patients treated during month, 494. Classification of clinics held: Prenatal, 1; surgical, 18; nose and throat, 8; eye and ear, 18; skin and genito-urinary, 8; medical, 8; venereal, included in skin; lung, 4; dental, 0; neurology, 5; stomach, 0; pediatrics, 5; gynecological, 5.

RED CROSS NOTES.—The national officers who will direct the activities of the Red Cross on a peace basis were elected at the annual meeting in Washington. The War Council, appointed by President Wilson in May, 1917, formally retired on March 1, and the affairs of the organization were transferred to the new administration.

Dr. Livingston Farrand, former president of the University of Colorado, who was appointed chairman of the Central Committee to succeed former president William H. Taft, actively assumed his duties on that day. The national officers elected were Woodrow Wilson, president; William H. Taft and Robert W. de Forest, vice-presidents; John Skelton Williams, treasurer; Alexander King, counselor, and Dr. Stockton Axson, secretary.

To serve with Dr. Farrand the following members have been selected for the Central Committee: Willoughby Walling, of Chicago; Robert Lansing, Secretary of State; John Skelton Williams, to represent the Treasury Department; Major General Merritt W. Ireland, Surgeon General, U. S. A., to represent the War Department; Rear Admiral William C. Braisted, Surgeon General, U. S. N., to represent the Navy, and Alexander King, to represent the Department of Justice.

—The American Red Cross has added an agricultural section to its many services in aiding the devastated lands of the North and East.

As a beginning, in an effort to help the soldiers in their work of gathering the harvest in the liberated region of the Aisne, the Red Cross has given fifty reapers and fifteen hundred scythes to the army agricultural corps.

—The American Red Cross has appropriated an additional \$100,000 for the maintenance of its sanitary units and dispensaries at the military cantonments of the country to the end of June. The plan of the Red Cross to continue its activities in this direction has the approval of Surgeon General Blue of the United States Public Health Service.

LIEUTENANT COLONEL E. G. ZABRISKIE of New York City has been designated Senior Consultant in Neuro-psychiatry for the American Expeditionary Forces, succeeding Colonel Thomas W. Salmon, who has returned to the United States for duty in the Surgeon General's office, psychiatrist of the Fourth Division. Subsequently he was Consultant in Neuro-Lieutenant Colonel Zabriskie went to France as Divisional Neuro-psy-psychiatry to the Third and Fifth Corps and to the First Army. After the armistice he served as Consulting Neuro-psychiatrist to the Savenay Hospital Center.

PERSONAL.—Dr. LA SALLE ARCHAMBAULT (A. M. C., —), announces the removal of his office to 46 Chestnut street, Albany, N. Y.

—DR LEON C. COTE (A. M. C. '17), ranking as 1st lieutenant, is in active service with Field Hospital 377 at Archangel, Russia. This hospital has been on duty in France with the 310th Sanitary Train of the Expeditionary Force.

Lieutenant Cote has sent to the Dean of the College, "with best regards to Faculty and boys," a copy of Number 7 of *The American Sentinel*, of January 25, 1919, a folio newspaper of four pages published weekly at Archangel. It is now known that Lieutenant-Colonel Corning and Captain Malcolm Douglas have joined the American detachment at Archangel, and will be able to join Lieutenant Cote and other fellow alumni of the Albany Medical College, in common felicitations upon the scene of their martial exploits, which is described as follows in a communication to *The American Sentinel*:

Sometimes, about once or twice every now and then, copies of the *Stars and Stripes* find their way up here to No Woman's Land and are instantly devoured by the news-hungry gang, searching for information regarding their comrades and general conditions in France, where we belong, but through Fate were sent up to this part of the world to quell Bolshevism and guard the Northern Lights.

We are so far north that the doggone sun works only when it feels inclined to do so, and in that way it is like everything else in Russia. The moon isn't so particular, and comes up, usually backwards, at any time of the day or night, in any part of the sky, it having no set schedule, and often it will get lost and still be on the job at noon. Yes, we are so far north that 30 degrees below will soon be tropical weather to us, and they will have to build fires around both cows before they can milk them. Probably about next month at this time some one will come around and say we will be pulling out of here in a day or so, but then, the days will be six months long.

In one issue of your very popular paper we noticed a cartoon, "Pity the Boys in Siberia," but what about us, Ed? Now, up here in this tough town there are 269,831 inhabitants, of which 61,329 are human beings and 208,502 are dogs. Dogs of every description from the poodle to the St.

Bernard and from the wolf-hound to the half-breed dachshund, which is half German and half Bolshevik and looks the part.

The wind whistles across the Dvina river like the Twentieth Century Limited passing Podunk, the snowflakes are as numerous as retreating Germans were in France a few weeks ago. We have good quarters, when we are here, thank Fortune for that, and good food, when it comes up. If we can stand the winter, we will be all jake, for a Yank can accustom himself to anything if he wants to. But just the same, we would like to see your artists busy on "The Boys in Northern Russia" and tell them not to leave out the word "Northern."

We also read in *The Stars and Stripes* that the boys in Italy had some tongue twisters and brain worriers, but listen to this: Centimes and sous and francs may be hard to count, but did you ever hear of a rouble or kopec? A kopec is worth a tenth of a cent and there are a hundred of them in a rouble. As you will see, that makes a rouble worth a dime, and to make matters worse all the money is paper, coins having gone out of circulation since the beginning of the mix-up. A kopec is the size of a postage stamp, a rouble looks like a United Cigar Store certificate, a 25-rouble note resembles a porous plaster and a 100-rouble note the Declaration of Independence.

When a soldier in search of a meal enters a restaurant, he says to the waitress, "Barishna, zakajeetyeh bifstek, pozhalysta," which means "an order of beefsteak, lady, please." You see, you always say "barishna," which really means "girl," and until a young lady is married she is always a "barishna" and is always addressed in that manner. She will answer the hungry customer with, "Yah ochen sojalaylu, shto unaus nyet yestnik prepasov siechas" (a simple home cure for lockjaw), meaning, "I am very sorry, but we are right out of food today." He will try several other places, and if he is lucky he is apt to stumble across a place where he can get something to eat, but when he looks at the bill of fare and learns that it cost him about 7.50 for a sandwich and a cup of coffee, he beats it back to the barracks.

MARRIED.—Dr. HUBERT S. CARROLL (A. M. C., '18) and Miss ELIZABETH RONAN MAAS were married at Albany, N. Y., April 26, 1919. Dr. and Mrs. Carroll will reside at Racquet Lake, N. Y.

In Memoriam

HARRIS J. CORNISH, M. D.

Dr. HARRIS J. CORNISH, a graduate of the Albany Medical College of the Class of 1870, died suddenly at his home in Walworth, N. Y., on April 14, 1919. Dr. Cornish was born at Lee Centre, Oneida County, N. Y., July 22, 1846, and received his preliminary education at the Rome Academy. After graduating in medicine he returned to his father's home in Lewis County and assisted his father in a large country practice. The father's health succumbed to his arduous life, and the son became disaffected and engaged in business in a drug store. Later he accepted a position as traveling salesman with the Norwich Pharmacal Company, and continued in this employment for thirty years until his death.

ERASTUS A. TAYLOR, M. D.

Dr. ERASTUS A. TAYLOR died March 12, 1919, at his home at Schuyler Lake after a lingering illness. He was the son of Milton and Jane Taylor and was born on the Taylor homestead February 1, 1849. He graduated from the Eastman Business College in Poughkeepsie and from the Albany Medical College with the class of 1880. He practiced medicine at Schuyler Lake for nearly forty years. He married Miss Grace Brown and after her death married Miss Clara Gano. He leaves his second wife, one son, Harold Taylor; two daughters, Mrs. Frank Ervin of Webster, Texas, and Mrs. Frank Williams of Utica, and one grandson, Milton Erwin of Webster, Texas.

★LEWIS T. GRIFFITH, M. D.

Dr. LEWIS T. GRIFFITH, ranking as lieutenant-colonel in the United States Army, died of disease in France, April 8, 1919. Dr. Griffith was born in Troy, N. Y., in 1873 and graduated from the Albany Medical College with the Class of 1897. He served in the United States Army Medical Department during the Spanish-American War, and later in the Philippine Islands. In 1902 he engaged in private practice in New York City, at 616 Madison avenue, in association with Dr. I. L. Hill. During this time he gave most of his attention to anaesthetics and held several hospital appointments. He was one of the pension examiners for New York City. He thus held an engrossing interest in medical affairs, and it was natural that the call to arms should have had from him a ready response. In 1917 Dr. Griffith was commissioned as captain in the Medical Reserve Corps and entered upon active service at once.

Dr. Griffith never married.

JOHN W. BURNS, M. D.

Dr. JOHN W. BURNS, aged 40, died Saturday afternoon, March 29, 1919, after an illness of two days with pneumonia, at his residence, 1800 Broadway, Watervliet, N. Y. Dr. Burns was born at the family homestead near Menands, was educated at the Albany Academy and the Albany Medical College from which he was graduated in 1901. He took a post-graduate course in New York before beginning practice in 1905. He had been for seven years health officer of Watervliet and was jail surgeon during another interval. He was affiliated with the Rensselaer and Albany County and Watervliet Medical Associations, was a member of the Ghosts' Club and Watervliet Council Knights of Columbus. He leaves his wife who was before her marriage, Miss Alice Brogan; his father, James A. Burns, superintendent of the Rural Cemetery; three sisters, Mrs. Francis X. Flynn of Albany, Mrs. Taylor of Menands and Miss Gertrude Burns, and a brother, James A. Burns, Jr.

Current Medical Literature

REVIEWS AND NOTICES OF BOOKS

The Unsound Mind and the Law. A Presentation of Forensic Psychiatry.

By GEORGE W. JACOBY, M. D., Author of "Child Training as an Exact Science," Fellow of the New York Academy of Medicine, Member of the American Medical Association, American Neurological Association, and New York Neurological Society, Consulting Neurologist to the Hospital for Nervous Diseases, The German Hospital, the Beth Israel Hospital, The Red Cross Hospital, and the Infirmary for Women and Children in the City of New York, etc. Funk & Wagnalls Company, New York and London, 1918.

Dr. George W. Jacoby, in his "The Unsound Mind and the Law," has produced a very readable and scholarly book; which shows a wide review of the literature on the part of the author; mainly confined, however, to German psychiatrists. The book consists of an exhaustive account of the methods of diagnosis in mental disease and a brief description of its various forms. Although there are a few scattered remarks on the inefficiency of the laws and lawyers in regard to insanity; there are no criticisms of psychiatrists from a lawyer's standpoint and no attempt to present a definite and complete statement of the legal ideas as to insanity. Insofar the text hardly fulfills the promise of the title. H. H.

English-French-Italian Medical Vocabulary. By JOSEPH MARIE. Published by P. Blakiston's Sons & Co., 1012 Walnut St., Philadelphia.

This small book contains phrases for directing first aid lists of English, French and Italian medical words, Italian abbreviations in general use,

Italian and French pronunciation, various tables for converting Troy weights into metric weights, metric into Troy, percentage solutions showing the required quantities in grains, weights of fluid drams in grains, European money and equivalent in United States and English money, tables of weights and measures, and lists of useful books for medical officers, dentists and nurses.

This little book should be very useful for medical military officers and nurses. It is unfortunate, however, that equivalents should not be given in German as in French and Italian, for the way to know an enemy is to understand his language. Only in this way can it be properly dealt with.

Quarterly Medical Clinics. Edited by FRANK SMITHIES, M. D., Augustana Hospital, Chicago, January, 1919, Vol. I, No. I.

These clinics represent the report of clinics and lectures given at the hospital to the senior students of the school of medicine of the University of Illinois. The notes have been edited, mimeographed, and given to the students at the succeeding clinics. They are now issued in this more permanent form for the use of medical men generally. In presenting these cases not only is the history and physical examination given as well as the results of the special examinations, but the detail of procedure of the various technical, so-called laboratory, examinations, is appended after the discussion of the case. In this manner the reader learns not only the results of the various examinations but how these results have been obtained. The title precedes the case discussed and in the contents are the leading symptoms and signs rather than the diagnosis. The latter is brought out in the discussion. This method has the advantage of stimulating the interest of the reader to make his own diagnosis and then learn from the discussion whether or not he agrees with the opinion presented. This volume, as is true with other series of public cases, shows the value of presenting certain phases of medicine by the so-called case system.

MEDICINE

Antigens used in the Wassermann Reaction.

E. D. RUEDIGER, *Journal of Infectious Diseases*, March 1919, Vol. 24, No. 3.

Alcoholic extract of the human heart, beef heart, and rabbit heart gave negative results with serum from fifty clinically non-syphilitic persons, while alcoholic extract of dog heart gave positive results in 32 per cent, and alcoholic extract from guinea pig's heart gave positive results—34 per cent. These were considered as false positives. With the serum from known syphilitics the alcoholic extract of beef heart and the alcoholic extract of rabbit heart frequently gave stronger positive results than the alcoholic extract of human hearts. The results were the same when the antigen was added fifteen minutes after the complement or fifteen minutes before the complement. Also antigen dilution of from one to thirty-five to one to seventy-five gave identical results of a dilution of one to twenty-five.

Lethargic Encephalitis.

LEONARD FINDLAY. *The Glasgow Medical Journal*, No. IV, October, 1918.

The author summarizes the English clinical data by the following quotation from Harris (*Lancet*, Apr. 20, 1918, p. 568): "The patient whilst in ordinary health begins to be languid and drowsy, with or without headache and other symptoms of malaise. In a few hours or days the weakness has increased very much, and indeed may amount to complete prostration, so that he lies helpless in bed and can hardly move a muscle. Together with this the drowsiness becomes more marked and develops into real lethargy. Pyrexia may be absent throughout or it may be present from the first, become severe, and persist. Cerebral excitement and delirium has been a prominent feature in some of the cases. In most of them local symptoms pointing to lesions in the bulbo-pontine area are present at some time or other. Of these ptosis, ophthalmoplegias of various extent, nystagmus, facial palsy . . . speech affections, and dysphagia have occurred in different combinations in different cases. Muscular tremors of a curious kind have been noted in some. . . . But there has been, as yet, no evidence of a localized limb paralysis such as one commonly sees in acute poliomyelitis."

Summaries of three cases follow:

Case I. Female aet. 6½ years. Onset with headache and drowsiness. Apathetic at home. Could be roused. Cerebration then was slow but normal. Obeyed all orders. Immediately relapsed into sleep. Catalepsy, right facial paralysis, nystagmus, redness and swelling of optic discs, double ankle clonus. Temperature normal. Spinal fluid clear, occasional lymphocyte, sterile. Lethargic five weeks. Later—five weeks—double ptosis, complete paralysis of both third nerves. Five months later—right sided facial paralysis, ptosis right upper lid, left external squint, mentally not so acute as formerly.

Case II. Male aet. 10. Onset double vision and squint. Then drowsiness. Could be aroused. Rigidity of neck, spasticity of legs. Kernig +. Temp. normal. Optic discs reddened. Sudden cyanosis and death.

Case III. Male aet. 4 10/12. Onset vomiting. Epileptiform convulsions followed by lethargy. Complete recovery.

These cases differ from Botulism, viz.: (1) The presence of drowsiness; (2) the fact that only isolated examples occur in any household; and (3) the failure to discover the etiological organism.

They differ from poliomyelitis, viz.: (1) drowsiness (polio: delirium and unconsciousness); (2) the virus (?) is not filterable (Wiesner's one experiment) whereas the polio virus is filterable; (3) 77 to 86% of cases are over 10 years of age; in polio over 90% are under 10 years; (4) seasonal incidence: these cases occur in the winter months, polio cases occur in July, August and September.

The author concludes that:

1. During the spring of this year (1918) there occurred in France and England an epidemic of a peculiar nervous disease.
2. The chief symptoms of the condition are lethargy and ophthalmoplegia or paralysis of a cranial nerve.
3. Pathologically the condition is characterized by perivascular cellular accumulations in the grey matter at the base of the brain; the virus is filterable.
4. It would seem to be a disease *sui generis* due to some unknown cause, and to which the name lethargic encephalitis has been given.
5. There is absolutely no evidence that it is of the nature of Botulism.
6. It would also seem to be quite distinct from poliomyelitis or polioencephalitis (infantile paralysis) on the ground of a different age incidence, of a different seasonal incidence, and of the fact that the virus is not filterable.

Droplet Infection and its Prevention by the Face Mask.

GEORGE H. WEAVER. *Journal of Infectious Diseases*, March, 1919, Vol. 24, No. 3.

The author concludes that gauze will filter bacterial spray from the air if the thicknesses are in direct proportion to the fineness of the mesh and the number of layers employed. Three layers of gauze with a mesh of forty threads or more will remove almost all bacteria-carrying droplets. Occasional fine droplets pass through. He, therefore, believes that such masks are useful when worn for protection by attendants on the sick and also when worn by the affected individual to prevent contamination of the surroundings. He emphasizes the fact that the use of masks should not lead to neglect of measures calculated to prevent transfer of infectious material by other means than by droplet spray.

Renal Function as Measured by the Elimination of Fluids, Salt and Nitrogen, and the Specific Gravity of the Urine. II. The Effect of High, Low and Normal Diets.

HERMAN O. MOSENTHAL. *Archives of Internal Medicine*, December, 1918, Vol. 22, No. 6.

In this paper (ii) the author has reinvestigated the subject, using three diets (high protein, low protein, and normal) on two series of individuals; the first series on normals, students and members of the teaching staff, and the second series on persons suffering from diseases causing impairment of renal function. Specimens of urine were collected at two-hourly intervals during the day and for a twelve-hour period at night.

The modified standards now adopted for normals fix (1) the maximal

specific gravity at 1.018 or higher for high diets and 1.020 or higher for low or normal diets. Evidently this is one of the most constant features to be relied on in estimating normal renal function by the test meal; (2) the variation in specific gravity at 9 degrees or more, though a smaller variation does not necessarily indicate that the kidney is abnormal, provided the specific gravity is 1.020 or over, but may point to a deficient available supply of water from which to form urine; (3) in judging the night specimen only urines exceeding 750 cubic centimeters may be looked on as exhibiting nocturnal polyuria; the concentration of nitrogen may be interpreted as normal if it is over 1 per cent, but not necessarily as an indication of diminished renal function, if it is lower. In summary, the height of the maximum specific gravity and the volume of the night urine are the most constant features of the normal test, regardless of the diet.

In abnormal individuals, the comparative value of test means for renal function on high and low diets was observed in 114 patients. Only the high and low diets were employed. It is very significant that the increase of night urine occurred almost exclusively on the high diet. In the first place, it may be concluded that nocturnal polyuria is a compensatory phenomenon to bring about the elimination of solids which a defective kidney cannot excrete except at lower concentrations than normal; in the second place, it appears that nocturnal polyuria is a signal that the kidney function is being overtaxed and that, in some instances at least, a suitable diet may do away with this unnecessary strain. Nocturnal polyuria may be absent even when there is a very marked renal insufficiency, but when it is present it indicates a distinct impairment of function, especially if the night urine is increased while the patient is on a low diet.

The Maximal Specific Gravity. This is probably one of the most important features in measuring renal function by the method under consideration. It has been previously noted how, as the activity of the kidney becomes impaired, there is a tendency for the specific gravity of the urine to assume a lower level until in the final stages it usually cannot be raised above 1.010. In comparing the results of the high and low diet, as far as the maximal specific gravities are concerned, in normal individuals, there is a fairly close agreement. Variations may occur but these are usually caused by the alternate retention or elimination of edematous fluid, and are apparently not influenced by the character of the test diet. The subject whose renal function is not impaired usually shows a fixation of specific gravity at a high level, while with an impairment of renal function this manifests itself at a much lower point.

It may be concluded, therefore, that the degree of variation of specific gravity in test meals for renal function is not very different, whether high or low diets be employed.

On Trinitrotoluene Poisoning, with Records of Five Cases.

ALBERT WM. GREGORSON and FRANK E. TAYLOR. *The Glasgow Medical Journal*, No. II, August, 1918.

The author cites the clinical records of five cases coming under his observation, two of which died and were autopsied. The clinical picture is that of an acute toxic jaundice resembling the picture of acute yellow atrophy of the liver.

The condition shows that there is an undoubted disturbance of the circulation of the bile ending in an accumulation and absorption of bile constituents in the blood, which leads to a severe anaemia with pronounced fall in the percentage of the hemoglobin, and extreme polymorphonuclear leucopenia.

This new type of jaundice, as subsequent events showed, was hepatogenous in its production. A slow pulse and a tendency to mental depression, and to oozing from any wounded surface, are usually associated with the severer types of jaundice. The pulse in Case I was never under 80, was frequently 110, and, in the terminal stages 160.

Itching of the skin, which usually accompanies jaundice, was entirely absent, and oozing from the unwounded mucous membrane was a prominent feature.

In Cases II and III there was no rash on the skin, and, as far as we can gather from the history of the onset, the principal channel of absorption seems to be the lungs and stomach.

A certain amount of dust must be inhaled, and a considerable amount becoming attached to the mucous membrane of the mouth and throat is swallowed with the saliva.

It has been shown that gastric disturbance and peripheral neuritis were the earliest symptoms, headache, anemia, and jaundice following in the order named.

The intensity of the jaundice varied from week to week, being at times a deep yellowish-green, and it was noticed that as the color faded the patients showed signs of improvement. The deepest discoloration was associated with the most serious stage of the disease.

The autopsies revealed a generalized jaundices, petechial hemorrhages in the peritoneum, heart (subendo and pericardium), stomach and diaphragm.

Liver: Advanced fatty degeneration.

Kidneys: Advanced cloudy swelling.

Brain and cord: Normal.

Outbreak of Typhoid Fever Among American Troops in England.

C. B. HAWN, J. D. HOPKINS and F. M. MEADER, *Journal of the American Medical Association*, February 8, 1919

July 11, 1918, there appeared at an American rest camp in England the

Fourth Casual Company, J. A. R. D., Camp Cody. Soon after its entrance to the camp several soldiers with fever were brought to Camp Hospital No. 34. At the time many cases of influenza were present among the soldiers who were passing through this camp, so that no special significance was attributed to the symptoms they presented. After a few days' observation the commanding officer of Camp Hospital No. 34 suspected that the cases might be typhoid fever. At about the same time the commanding officer of Camp Hospital No. 36 transferred a few patients to U. S. Base Hospital No. 204. Suspicion of typhoid fever was soon aroused, and blood cultures were ordered by the attending medical officer. The district sanitary officer of United States troops inspected the patients and took specimens of blood in all of the cases. *Bacillus typhosus* was isolated in eight out of ten cases two days later. During the next month *Bacillus typhosus* was isolated from the blood or feces in ten more cases. Altogether, thirty-eight soldiers developed typhoid fever. *Bacillus typhosus* was isolated in eighteen of these cases.

The organization left Camp Cody, Deming, N. M., June 15, 1918, for Camp Merritt, N. J. While en route, June 18, the organization stopped at Meridian, Miss., and was taken for a swim in a lake. The organization arrived at Camp Merritt, June 21, embarked, June 28, and arrived at Liverpool, July 10. After disembarkation the organization proceeded to the rest camp at Romsey, England. At the British port of debarkation, three cases were left at Red Cross Hospital No. 4, and it is reported that two other cases were left at some station en route to the camp. At the American Rest Camp forty soldiers were found ill and transferred to United States Base Hospital No. 204, where a diagnosis of typhoid fever was made on thirty-eight of them.

From a study of the history of each case it was noted that the date of onset varied over a period of about a month. The first patient was ill on leaving Camp Cody. The second case developed, June 19; the third, June 21; the fourth, June 24; three developed on the 26th, four on the 29th, and five, July 6, after which a case developed every day up to the time the organization arrived at the American rest camp at Romsey.

The organization left the American rest camp before the diagnosis of typhoid fever had been established, and fifty-seven other cases developed. This makes ninety-eight cases from a total of 248 men.

These patients became infected either in the train early in the journey or by bathing in the water at Meridian, Miss., June 18. The water may easily have been infected by one or two typhoid patients that were present in the organization at the time. In the remaining cases of typhoid the men undoubtedly received their infection by contact with the patients who were ill in the organization. This could easily be done since the men were crowded together on the train or on shipboard.

There were about 1,800 men on board the steamer, which number was composed of Casual Companies 4, 10, 11 and 15, and Supply Company

112. Most of these organizations went on to France, and among the members of Casual Company 4, fifty-seven other cases developed, as is mentioned above.

All of these patients had been inoculated with either typhoid vaccine and paratyphoid vaccine or triple typhoid vaccine or both. Many of them had received several doses in excess of the required number and the men were inoculated at widely different posts and at different times. One patient says that he received but one dose; otherwise it would seem that the whole organization was thoroughly immunized.

The most interesting question that arises in regard to these cases is: Why did this large group of vaccinated men become infected? To this, three possible answers present themselves: First, that the vaccination was defective; second, that the infection was due to the abnormal race of *B. typhosus* against which the vaccine did not protect; third, that the men received an overwhelming dose of the infecting organism.

The first hypothesis seems improbable from the fact that the men were vaccinated at different camps and at different times, so that it is hardly possible that all received the same batch of vaccine. Additional evidence on this point is seen in the record of their agglutinins for paratyphoid A and B. When first examined, the majority had from 25 to 100 agglutinin units for these organisms in their serums. This means agglutination in dilutions from 1:100 to 1:500. It is no lower than frequently found in healthy soldiers from eight to twelve months after vaccination, and shows that the vaccine was good and that the men reacted to it. It is true that a few men in the series had a very small amount of agglutinin or none at all for these organisms, even when their records stated that they had received triple vaccine; but this fact could not explain the majority of the infections.

It might be suggested that the paratyphoid agglutinins that were observed in these cases were group agglutinins, due to the typhoid infection and not to the paratyphoid vaccination. It has been the experience of Dreyer and his co-workers that group agglutinins of this sort are not encountered. Moreover, it was readily shown in cases that were tested by absorption that the three agglutinins were distinct. The possibility that these infections were due to defective vaccine can, then, practically be excluded.

As to the second hypothesis, that the infections were due to an abnormal strain of typhoid, we have no positive evidence. All the strains isolated gave characteristic fermentation results on glucose, lactose, mannite and saccharose; and all with one exception agglutinated in typhoid immune serum in about the same dilution as the homologous strain. One strain isolated from the blood has remained inagglutinable so far, although its cultural reactions are typical.

It has been shown by Weiss¹ that minor differences both antigenic and

¹ Weiss, H.: J. M. Res. 35:403 (Jan.) 1917.

cultural can be brought out between certain races of *B. typhosus*. We propose to investigate these strains further in this respect.

In the absence of evidence that prophylactic immunization of these men differed in any way from that which has, in the vast majority of cases, given adequate protection, or that the strain of typhoid with which they were infected was atypical, there remains the hypothesis that they received an excessive dose of typhoid bacilli.

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Original Communications

ACUTE THYROIDITIS.

Read at the Annual Meeting of the Medical Society of the State of New York, Syracuse, May 7, 1919.

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In a series of ninety-one cases operated upon by me at the Albany Hospital for various forms of thyroid lesion, I have met with three instances of acute suppurative inflammation. In two of these cases the infection occurred in normal thyroid glands, and in the third case the infection took place in a cystic adenoma of the thyroid.

Acute thyroiditis, whether occurring in the normal gland or in a pre-existing tumor or hypertrophy, is of comparatively rare occurrence. At first thought, this fact might be difficult of explanation, for the close proximity of the gland to the pharynx, tonsils and lymphatic structures of the throat might well be expected to predispose to infections within the thyroid gland by direct lymphatic extension. A study, however, of the lymphatic supply of the thyroid demonstrates that there is no direct lymphatic circulation between the structures of the throat which are so commonly the seat of acute infections and the thyroid gland. Therefore those cases in which the infection occurs by way of the lymph vessels are, it seems to me, always preceded by a primary focus of infection in the upper portion of the trachea or in the larynx. In the case of infection by the blood stream, which I believe is by far the most frequent avenue of entrance

in tumors and hypertrophies of the organ, the processes of degeneration present in such lesions predispose to inflammation by a lowering of the local resistance of the tissue. It is particularly in adenomata which are undergoing degeneration and contain free blood and necrotic material that such infections most often occur.

The histories of my three cases are briefly as follows:

Case 1. Mr. S. H. T. Age, 64; married, merchant. Admitted to the Albany Hospital July 21, 1916. No. 55354.

The patient's previous health had been good. About one month before entering the hospital he suffered from laryngitis and trachitis. This condition persisted for about three weeks and was accompanied by almost complete loss of voice and severe cough, with a large amount of expectoration. About three weeks after the onset of this throat infection he had a severe chill which was followed by a rise in temperature and by pain in the region of his throat. Through his physician he sought the advice of a laryngologist by whom he was treated with local applications to the throat and internal medication for six days, when a diagnosis was made of acute suppurative thyroiditis, and the patient was referred to me. On admission to the hospital his temperature was 102° and pulse 120. He was suffering from extreme dyspnoea and dysphagia. There was very little perceptible swelling in the region of the thyroid gland but the overlying skin was somewhat reddened and on palpation there was a stone-like hardness of the gland. On account of the unfavorable condition of the patient it was deemed unsafe to administer a general anesthetic and the operation was performed under local anesthesia. This consisted of a free incision of the skin and subcutaneous tissue and exposure of the gland. The capsule was punctured and about 50 cubic centimeters of thick yellow pus was evacuated. Cultures from this pus yielded staphylococcus and saprophytic organisms. The patient's temperature dropped to normal within twenty-four hours and he made a rapid recovery. The wound healed readily and the patient had no subsequent trouble.

Case 2. Mr. F. D. M. Age, 48; single; farmer. Admitted to the Albany Hospital April 24, 1918. No. 64156.

The patient had had no previous thyroid lesion. His present illness could probably be attributed to a sore throat from which he suffered five weeks previously. He apparently recovered from this throat infection after a week or ten days, but he states that there persisted in his throat a sense of irritation, or as he described it, "the feeling of a fish bone in his throat." Eight or nine days previous to his entering the hospital he noticed some swelling of the throat just below the thyroid cartilage. This was accompanied by pain in this region, occasional slight chills and some febrile symptoms. This man was referred by his physician to a

laryngologist by whom a diagnosis was made of acute thyroiditis, and an operation advised. On admission to the hospital this patient was found to be suffering from an extreme degree of pressure upon the trachea and oesophagus. There was little external evidence of swelling, but the skin overlying the thyroid gland was reddened and slightly oedematous and there was a characteristic hardness of the gland and overlying tissues. This case was likewise operated upon under local anesthesia and the gland freely opened and drained. Cultures taken from the gland at the time of the operation yielded staphylococcus albus. Prompt relief was experienced from the evacuation of the pus and the patient was able to leave the hospital in about a week. A small amount of drainage persisted, however for several weeks before the wound eventually closed. The patient has been in good health since.

Case 3. Mrs. B. L. Age, 33; married; has three children, 7, 6, and 4 years of age. Admitted to the Albany Hospital January 10, 1919.

The patient first noticed an enlargement of her neck four years previously, just after the birth of her last child. This enlargement was in the median line of the neck between the thyroid cartilage and the base of the sternum. The increase in size was gradual until about six months ago, since which time there has been a more rapid increase in the size of the tumor. The patient states that she had been very nervous during the past year and the pressure of this growth caused her some discomfort and at times she has experienced difficulty in breathing. In October, 1918, about three months before her admission to the hospital, the patient had a very severe attack of influenza of about ten days' duration. She gives no history of sore throat during this attack. She states that before she was out of bed from this illness her neck began to swell and be painful and that she had a rise in temperature practically every day. On New Year's Day she suffered from a chill and from that time on she grew rapidly worse. Her breathing became more difficult and finally a day or two before entering the hospital she completely lost her voice. She entered the hospital on January 10, 1919. She was found to be suffering from dyspnoea and dysphagia. She was profoundly septic and her condition, due to her long continued illness, was very critical. There was a large and very tense tumor situated in the median line of the neck, extending a little more prominently to the left side. Diagnosis was made of the infected thyroid adenoma. The patient's temperature on admission to the hospital was 103.5° and pulse 120. Under local anesthesia the tumor mass was opened and a large amount of purulent fluid mixed with blood and broken down thyroid tissue was evacuated, and free drainage was instituted. Cultures made at the time of the operation yielded a hemolytic streptococcus. The patient was very ill for a period of two weeks but was eventually able to leave the hospital with a small discharging sinus still persisting. This later completely healed and the patient is now slowly regaining her weight and strength. No attempt was

made in this case to remove the thyroid adenoma but she was advised to return at a later date to have this done.

These three cases illustrate very clearly the types of thyroid infection which we meet. In cases one and two there was no history and no evidence of a previous thyroid lesion. These cases were preceded by infection of the throat with probably an extension downward of this infection and involvement of the larynx and trachea, and it seems fair to assume that there was a direct extension of the infection, probably by way of the lymphatics through the trachea into the thyroid gland. In the third case, as the history would indicate, the patient had suffered for four years with an adenoma of the thyroid which had undergone cystic degeneration. In this case the infection of the thyroid adenoma was undoubtedly haematogenous in origin and was a part of her general influenza infection. In the two instances in which the infection was a direct extension from the throat the cultures yielded *staphylococcus aureus* and *albus* respectively, and in the case of the blood infection we had to deal with the *streptococcus*.

The symptoms of acute thyroiditis vary accordingly as the inflammation of the gland is a primary affection or arises in some lesion previously existing. In the former patients usually suffer from chills, malaise and headache, common to all infectious diseases. Pain is felt in the region of the gland, more pronounced on one side because the process usually begins in a single lobe, often radiating to the ear and side of the neck, lancinating in character and greatly aggravated by extension of the head. As a result the attitude may be somewhat characteristic, the head bowed and held very rigid. Local swelling is rarely noticed early and is never a marked symptom. Difficulty in breathing and swallowing are present, the degree depending upon the severity of the infection and the extent of gland involvement. The voice may be affected, even absolute aphonia is seen and an irritative cough with slightly blood stained expectoration or a true haemoptysis may be present.

One thing which impressed me particularly in all of my cases was the difficulty which is experienced in arriving at a correct diagnosis. This I think is the particular lesson which these cases

bring to us. It is true that acute suppurative infections occurring in a normal thyroid are of comparatively rare occurrence. This type should not be confused with the milder forms of inflammation which are often seen during many of the acute infectious diseases, relatively most often after typhoid fever in which the symptoms are of a much milder nature and which seldom require surgical intervention. It is then easily understood, because of the rare occurrence of the affection, why these cases often go for a considerable time unrecognized. This is not due to any lack of care or attention on the part of physicians, but to the absence, I might say, of the usual local signs of acute inflammation and suppuration. Let us see why this is so.

The normal thyroid gland is situated at the front and sides of the neck and surrounds the upper part of the trachea and oesophagus like a horseshoe. The gland is surrounded by a closely adherent connective tissue capsule derived from the pre-tracheal layer of deep cervical fascia. The anterior and lateral portions of the gland are covered by the capsule. Passing around the sides of the gland to its posterior surface this capsule splits into two portions. One remains in contact with the gland and invests its posterior surface. The other, the thicker of the two, passes to the posterior surface of the pharynx and oesophagus, thus enclosing them with the larynx, trachea and thyroid gland in a common sheath.

It is readily seen, then, that with an inflammatory process arising within the substance of the gland, the swelling which occurs produces its first and most marked effect upon the trachea and oesophagus which it surrounds on three sides. The capsule being but slightly elastic, under the influence of a sudden increase in the volume of gland, the lateral lobes are approximated, exerting a side to side pressure upon the trachea and oesophagus. Thus the earliest symptoms, with the exception of pain, are those of tracheal and oesophageal stenosis. It is my experience that the cause of such stenosis is apt to be sought for within the throat rather than as due to compression from without. Both of these cases had been referred by their physician to a laryngologist because it was considered probable that they had to deal with some process within the larynx or trachea. Of

particular interest in this connection is the lack of swelling that is manifest in the region of the gland in these cases of acute infection of the normal thyroid. Herein lies the explanation of failure to recognize the true condition. A symptom, however, which is pathognomonic is the stony-hardness of the gland elicited on palpation. I know of no other condition in which the gland imparts a similar feeling, unless it be carcinoma. Here the history and the absence of fever in the latter disease should make differentiation of these conditions easy.

In the case of infection occurring in a pre-existing thyroid lesion as illustrated in the third case here reported, the symptoms of the local inflammatory process were obscured by the general infection from which the patient was suffering. In fact, as the history in this case indicates, the symptoms of the acute infection had not completely subsided when the local process in the neck began and it was thought that the patient was suffering from a relapse of the influenza. Only after the local process had developed to a considerable degree was the exact condition recognized. The severity of the pressure symptoms in cases of this type depends largely on the location of the tumor or cyst which is the seat of the infection. In other words, if the pre-existing lesion already causes pressure on the trachea and the structures of the neck, with the advent of an infection this symptom will be greatly increased. If, on the other hand, we have to deal with a tumor or cyst that is well outside the main sheath of the gland capsule, pressure symptoms will be relatively slight.

The hypertrophies of the gland, both the colloid and hyperplastic types, in which degenerations are rare, are far less frequently involved in acute inflammatory processes.

The treatment of acute thyroiditis and of suppurative processes in pre-existing thyroid lesions is *per se* like that of other local inflammations. There are, however, a few points of special importance which have been gained in the study and treatment of these cases of which I desire briefly to make mention. Inasmuch as the local condition of the throat is such that the administration of a general anesthetic might prove both difficult and dangerous, whatever operative procedure is undertaken should be done under local anesthesia. These patients are often so toxic that very

little anesthesia of any nature is required. It is essential that a free opening be made in these cases and drainage established as soon as a correct diagnosis is made. Care should be taken that every collection of pus is reached. Where drainage of more than one lobe of the gland is necessary, it is usually possible to establish this through a single opening in the capsule. As little injury as possible should be done to the gland. No extensive surgical measures, such as partial excision of the gland or removal of tumors or cysts, should be undertaken in the presence of such serious infection. Rather, these procedures, when deemed necessary, should be reserved for subsequent operation. A method of opening the gland which I have followed with success in these cases consists of a free incision of the skin and subcutaneous tissue, retraction or incision of the overlying muscles, and a thorough exposure of the gland or tumor. Then, with a hemostat, at a point where no large vessels are visible, the capsule and gland substance is punctured. The opening can easily be enlarged so that the finger may be introduced and a thorough exploration made without danger of serious haemorrhage or injury to the trachea or oesophagus. The wound should be left completely open so that free drainage is assured.

In conclusion I would emphasize the following:

1. The relative infrequency of acute thyroiditis in either the normal gland or in the pre-existing pathological conditions.
2. The condition, particularly in the early stage, is apt to be unrecognized.
3. The diagnosis can be made more readily if the possibility of acute thyroiditis is borne in mind and confirmed by the stone-like hardness of the gland.
4. Treatment by simple incision and puncture under local anesthesia, avoiding all possible injury to the gland tissue, will give the best results.

THE EPIDEMIOLOGY OF TYPHOID AND PARATYPHOID.

Lecture delivered in the Post-Graduate Course in Infectious Diseases and Public Health for Physicians and Health Officers at the Albany Medical College, Wednesday, March 26, 1919.

By PAUL B. BROOKS, M. D.,

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If we were musically inclined, instead of singing "This is the end of a Perfect Day" we might sing "This is the end of a Typhoid Day." Judging from your program the day has been very largely devoted to discussion of typhoid. Typhoid fever is one of the diseases which we feel is being brought under control. If we are going to keep it moving down the incline it means that we, the health officers and the State Department of Health, must cooperate in well directed efforts at control. Dr. Brewer has spoken of the value of anti-typhoid vaccination. If we could vaccinate everyone, control would be simple, but unfortunately we cannot do that and must depend largely upon our efforts in other directions.

In this last hour we are going to discuss epidemiology, a phase of the work of typhoid control which to me is interesting and very important. Of course, in an hour's talk we cannot go very far in the discussion of epidemiology; we can only touch upon some of the most important points.

Before I take up the epidemiology there are one or two more or less elementary points that I want to touch upon. We are considering the two diseases, typhoid and paratyphoid, together here because in their epidemiology the same rules apply to both. When I was a hospital interne and for some time afterward I was under the impression that paratyphoid was simply a mild form of typhoid fever. To-day we know that, while these two diseases are very closely related, they are two distinct diseases. Clinically many of us have seen cases of paratyphoid which it was very difficult to distinguish from typhoid. As a rule, however, the paratyphoid cases are characterized by a more abrupt onset, very often with gastro-intestinal symptoms — vomiting and diarrhea — with an immediate rise of temperature.

After four or five days the temperature declines usually by crisis. It is by means of the agglutination test that we are able to definitely distinguish paratyphoid from typhoid. This is a practical point to keep in mind: when you have a case that you suspect may be paratyphoid, where you are in doubt, in sending in your blood specimen for agglutination test it is always well to ask that the sample also be tested for paratyphoid.

Another elementary point is that when you get a typhoid outbreak or a case of typhoid it invariably means that preceding it there has been a case or carrier of typhoid which has been responsible for the infection. For instance we do not get typhoid from water unless it has been infected by a case or carrier. It seems foolish to reiterate that, yet not so very long ago a health officer told me that he had cases of typhoid from a well. When I asked him if he knew how the well had become infected he explained that he had found a dead horse buried near the well.

Epidemiology, in the sense in which I want to consider it today, simply means the process of investigation to find the source of infection in an outbreak of typhoid or in a case with a view to eliminating this source of infection.

We will assume, for purposes of discussion, that we have an outbreak on our hands and that we want to find out what the source of infection is. How will we go about it? First of all, of course, right at the outset we want to have clearly in our minds what the possible sources of infection or agencies involved in infection are. We know in a general way that infection is conveyed through water, milk, other foods and contact (contact with a case or carrier). Water causes by far the largest number of cases; that is to say, when you get a water epidemic it usually involves a large number of people so that in the aggregate taking the state at large a majority of the cases will be water cases. On the other hand water is by no means the most frequent source of infection.

There is one danger to which we are all more or less subject and that is the danger of jumping at conclusions — something that we all do occasionally. We get an outbreak and it may seem to us perfectly obvious what the source of infection is and we may feel that it is unnecessary to make any investigation and

occasionally you may find an outbreak where it is unnecessary. In a large majority of instances if we go on with our investigation, as we should, we are very apt to find that our first impression was wrong. A very common early conclusion, is that water is responsible for our cases or outbreaks. Very frequently when report cards come in for typhoid cases, where the space for the source of infection is filled out, it is stated that water (or well water) was the source. This impression is probably due to the fact that we know, as already pointed out, that *in the aggregate* a majority of *cases* come from water.

The fact that all the patients in an outbreak used a public water supply does not prove, of course, that they got their typhoid from the water supply. Even if you send in a sample of water and it comes back with the report of colon bacilli present it does not prove that the outbreak came from that water. All that it proves is that at the time you took that sample, which is usually from two to four weeks after the infection actually occurred, that there were colon bacilli present which might have been from either human or animal sources. The conditions at the time when infection occurred might have been entirely different. If you feel you have ground for suspecting the water, however, take immediate steps to correct any unsafe condition. Then go on with your investigation.

In the investigation of an outbreak there are two steps: the first is *getting information* and the second is *using it* after you get it. In order to get information regarding a typhoid outbreak, and when I say typhoid, of course, I am referring to paratyphoid as well, there is only one way that I know of to get satisfactory information and that is to go right around and get a complete history of each case. I do not mean, of course, a clinical history, I mean an epidemiological history. There is certain information that we want to get — certain questions we want to ask. They are the kind of questions that appear on the investigation card which we passed around last week. It means work for whoever does it, usually for the health officer. But if you want to undertake the investigation of your outbreaks (and if you do not somebody else should be called in to do it), the work will produce valuable results, commensurate with the effort necessary.

In getting these histories it is practically always safer to ask all questions in every case. Of course, occasionally you will find a case, the source of which is evident without asking any questions. But very often, if you fail to ask certain questions, when you come to study your data and to try to connect your chain of evidence, you will find that the very evidence which you failed to get is needed to supply the "missing link." Then, if you are conscientious, you will have to go back a second time.

With this, as with other work, you get much more effective results if you have a system. A man has got to have a phenomenal memory to start out to take an epidemiological history of a case without having some system to follow. I know, because I have tried it. There are two convenient systems. One is the use of a blank, a form with the questions on and with spaces for the answers to questions. Of course the disadvantage of that card is that not very much space is left for writing the answers, but if we do not write too bold and round a hand and take advantage of the space for remarks we can get most of our information on. The advantage of that card is that it is small enough so that you can stick a bundle in your pocket without much trouble. The other system is that of having the questions on a card and simply following these questions and using a note book for noting the information. The difficulty that I have found with that is that when you come to analyze the data your notes are more or less mixed up and it is difficult to pick out special points.

In the smaller places,—or where you are not fortunate enough to have public health nurses—the health officer will, of course, have to do this work himself if it is done. In the cities or where you have public health nurses if you have the right kind of a nurse this part of the investigation can very often be turned over to her. If you do that she has got to have some drilling along certain lines. The great trouble that I have had in using nurses in this sort of work is that they are apt to ask their questions in a perfunctory way. They simply ask the questions that appear on the card and put down the answer the informant gives. Often the answer is merely based on an impression and is inaccurate and misleading.

This is perhaps particularly important—in regard to the date of onset. As a rule when you ask a patient when he was taken sick he will give you, not the date of the first symptoms,—which you want—but the date when the doctor was called, or the day when he went to bed. Of course, what you are after is the date of the very earliest symptoms and it is only when you have that date and have it accurately that you can determine when the infection occurred and it is usually important to know when the infection occurred. We know that typhoid fever has an incubation period, usually about a week or ten days, so that if we get the date of onset accurately and go back a week we can assume that the infection probably occurred in the week or ten days preceding that.

Now we will assume that we have gotten our information and we are ready for the second stage, which is the *study* of the information we have collected. About the first thing that I usually do, and I think others who do this kind of work do the same thing, is to make a general tabulation of essential points. We will sit down with our cards, just as the detective would sit down with his evidence to study it, and tabulate the important points under their respective heads. Up here I have shown a very rough tabulation—about the kind I would make, probably using an ordinary sheet of paper, a ruler and a lead pencil. The things that we are looking for chiefly, of course, are things in common,—that is, possible sources of infection in common—and they are very much more apt to come out when we get our different points grouped together in this way.

(*Referring to case on tabulation chart.*) We sometimes come across a history when we come to study our evidence that does not “hitch up” with the rest of our cases,—don’t seem to have anything in common with the other cases. We are apt to think here of the possibility of an error in diagnosis. Of course, if you had a positive widal it is reasonably safe to assume that diagnosis has been correct. To-day a blood test is required by the Code in all cases in which typhoid or paratyphoid is suspected.

In studying our data it is usually convenient to use some simple graphic methods, as for instance the map for showing the location of cases. We will often find that some peculiar grouping

of cases stands out immediately when we have used map tacks to mark locations, when perhaps we would not have noted it from looking at the figures on paper.

Another convenient graphic method and a simple one is the case incidence chart. That is the kind of a chart that I have shown here. This chart is divided into five day periods and the dots represent the number of cases that have had their onset in each of those five day periods. It is as a rule most satisfactory to chart your cases according to five day periods. In charting them by single days, the result is less striking. Just as soon as you look at that kind of a chart, if you are doing this sort of a thing, you will get a pretty definite impression.

You can pretty nearly make a tentative diagnosis as to the possible source of infection by simply looking at the chart. Here is a sudden rise in case incidence—in other words, an “explosive” outbreak. As a rule that means one of two things, water or milk. This was, in fact, a water outbreak—that at Herkimer within the past year. There is another thing that you will notice from that chart and that is that the drop in incidence of cases is just as striking as the rise. From this you can draw another conclusion: the source of infection only operated temporarily.

In this outbreak they were using a polluted water. During a period of few days chlorination was discontinued. This epidemic was the result. They got their apparatus working again and the cases dropped. Along in here they stopped chlorinating for a matter of an hour or so (something happened to the plant) and we got this slight secondary rise.

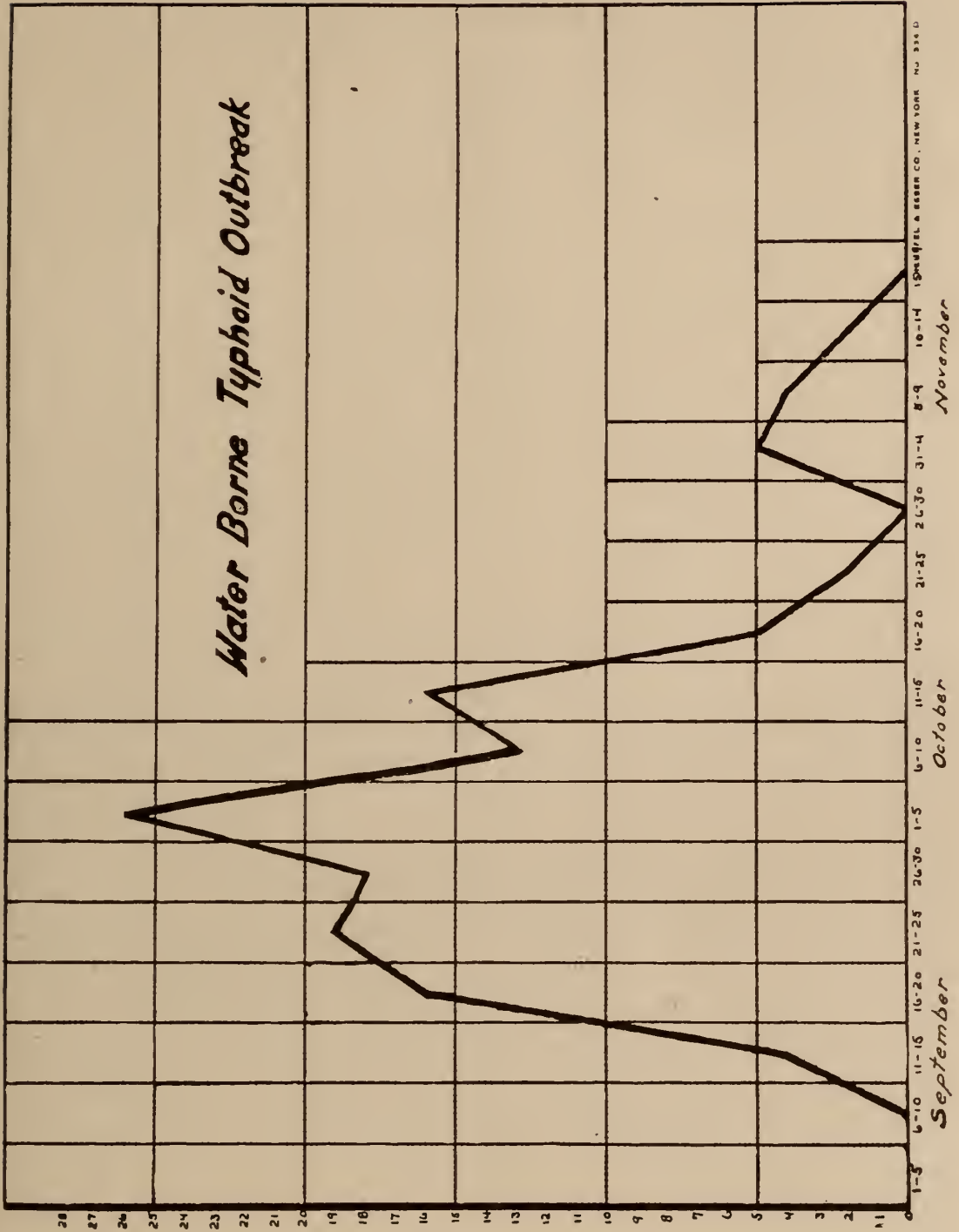
Now let us look again at this tabulation. This, incidentally represents a fictitious outbreak. You will notice from this, for instance, over here under “water,” that all these people used the public water supply. That probably is of no significance assuming that the public water supply has been generally used. Then you go over to “milk supply,” that is, the milk used, and you find that the name of “Smith” appears very frequently, Smith being assumed to be a milk dealer. There are two people there on that chart, however, who apparently never used Smith’s milk. Now we want to be sure that our information is accurate,

and if we are not sure we ought to go back and find out whether those people might not at some time about the time the infection occurred — a week or ten days before the onset of the cases — have gotten some extra milk from Smith. Possibly they might have gotten an extra bottle. Possibly they might have gotten it in some indirect way; for instance, out in Delmar where I happen to live, we had an outbreak that was traced to an infected milk supply. There were two or three people who had typhoid who apparently had not used this milk, but it developed that they used this supply in the drug store and that these people had gotten it in milk chocolate and in malted milk.

If Smith is a large dealer selling most of the milk in town it may not mean much, but anyway we ought to look him up. If he is a distributor we will go to his plant and we will interview his employees, but the thing we want to know particularly is where he gets his milk. A point of particular importance:— we want to know is if at any time about the time when infection would have occurred in these cases he by any possibility got some extra milk from some unusual source. If he did we are going to be very suspicious of that extra can of milk, because it was an unusual circumstance. He had been getting milk right along from these other people and nothing had happened.

But we will assume that Smith is getting milk only from one dairy. Then we will go to the dairy farm and the first thing we want to do is, of course, to see everyone on that farm, including the proprietor, his family and his employees. We want to know if he has had any new employees,— if he got a new hired man about the time the infection occurred. We want to know if there has been any illness suggestive of typhoid; if they had typhoid within the last few years; if there has been any diarrhea or any stomach trouble (“stomach trouble” sometimes means gall-bladder trouble, and that may mean a typhoid carrier).

Speaking of new employees a rather interesting situation developed in Kingston within the past year. There they had an outbreak which was traced to a dairy farm. They found that the man who ran the dairy had one employee who was a well driller, the dairyman carrying on a well drilling business as a side issue. Along in the influenza epidemic some of his milkers got sick and



he brought in his well driller to help with the milking. He was found to be a carrier. About two years ago they had an epidemic of typhoid in Kingston and the same dairy was suspected. The same well driller was working for the same dairyman at that time and it is more than probable that he was also responsible for that other outbreak.

We will assume that we have found someone whom we suspect may possibly be a carrier. Of course the thing we want to do immediately is to get a sample of his excretions, including both feces and urine. Sometimes it takes a little tact and patience to get fecal sample from a suspected carrier, but you can usually get it if you hang around long enough. When we get our sample we want to get it to the laboratory in the shortest possible time, as the organisms tend to die out rapidly. Otherwise you may get a negative report that may be misleading. If you do not find anyone to be suspicious of, it is usually well to take blood samples from everyone on the dairy. If you get a positive widal that may give you a clue.

One extremely important point to bear in mind is that typhoid carriers are very apt to be intermittent in discharging their organisms. A carrier may go for months and never discharge organisms. For this reason it is particularly important in getting fecal samples from suspected carriers to see that they get a cathartic the night before. Incidentally I personally believe that this has an important bearing on the fact that typhoid is much more marked in the late autumn than at other times. We know that along about the latter part of August or the first of September bowel trouble is very prevalent. I am personally strongly inclined to believe that it is the fact that our typhoid carriers are "loosened up" by the bowel trouble that accounts for the greater prevalence of typhoid then. When we get an outbreak of diarrhea it is very apt to be followed by one or more cases of typhoid. Here again, I believe that the bowel trouble simply "loosens up" the typhoid carriers and that these cause the typhoid infections.

Sometimes you will suspect someone of being a carrier and he will tell you that he has not had anything to do with the handling of the milk. He may be telling the truth. For instance, down

in Dutchess county they found two carriers and neither one had apparently had anything to do with the handling of the milk. The handling of utensils could not be positively excluded. But they used well water for washing pails and cans, the closet — a “dug” closet without a vault — was a short distance from the well; flies were numerous, the closet was not protected against flies and the utensils were exposed to flies. This would seem to establish a reasonable “line of communication.”

So much for milk. We have not found anything on Smith's dairy so we will go further. We go over to “other foods” and we find celery has been used by three or four different people. We note that the celery came from two different sources, a man named “Mack” and “Dominick's Grocery.” We want to know if both these retailers were using the same celery. If so we will visit the place where the celery was raised to make sure that it has not been washed in infected water or handled by a carrier. Is it not very likely that celery will prove the agent, but it at least ought to be investigated.

Ultimately we may have to come back to our water. If we find by elimination or otherwise that water was the apparent source of infection then we want to know how the water got infected, because, if we don't find that out, the source of infection or individual who infected the water is likely to continue to infect others.

Sometimes the source of infection of water is obvious. For instance we had an epidemic in a city not very far from Albany; in that city they were getting their water supply from the Hudson river and using it raw. Their sewer outlet was only a short distance from the water intake. A number of years ago, many of you remember, they had an extensive outbreak of typhoid in Albany due to the flooding of the filter plants. Sometimes, as in this Herkimer outbreak, where polluted water is used and treated, the treatment breaks down. Now and then we find places where there are auxiliary pipe lines, from polluted sources, connected with the public supply. Sometimes they are for fire protection. At other times they are maintained by large industrial plants to supplement the public supply when they are using a great deal of water. The connection is protected by

valves, but something may happen to the valves. Typhoid outbreaks have been traced to these auxiliary supplies. For instance in one city they had a typhoid epidemic within the last couple of years and it afterward developed that there was a large industrial plant where they had an auxiliary water supply from a polluted source. When the city supply ran low in dry weather, the management of the plant, thinking they were rendering a public service, are said to have turned their water into the public mains. The typhoid outbreak followed.

If you have a usually safe water supply, then we want to make very great efforts to find the case or carrier. If we find a privy on the water shed we want to make an effort to find how the privy was infected, because it is the source of infection that we are after.

We have been discussing outbreaks. The investigation of a single case is practically the same, except that there is less to it. We want to get a careful history and we want to study it because the source of that single case might be the source of many others. There is one point in regard to imported cases. If we believe they were imported we should determine whether they were sick when they came to our municipality; if not, if they were taken sick within two or three days; if so, it is reasonable to assume that that case was imported. If it was imported we ought to get all the information we can about that case. Get previous addresses and the names of contacts and either send them to the other health officer directly or report to the State Health Department so that we can pass them along. This is both a matter of courtesy and one of health protection. That constitutes the little I want to say on the subject of epidemiology.

If you are going to undertake to do this work it means a lot of work, but on the other hand there is a whole lot of satisfaction in being able to get at the source of an outbreak. There are a number of health officers who have done very good epidemiological work. There is a health officer in this class who "ran down" a typhoid carrier who had infected a number of people. Incidentally we are still helping to support the same typhoid carrier, unless he has been released within the last week or so. If you cannot or do not want to undertake it you are

always at liberty to send for the sanitary supervisor or epidemiologist from the State Department of Health and they under any circumstances always stand ready to give you any advice or assistance you ask for.

Before I stop I want to say a word about a manual we are getting out. We have been working for some time on a little manual on the Prevention and Control of Communicable Diseases. We believe it is going to be of some value to the health officer. It is on the press now and we hoped to have had it out before this. It is divided in three parts. The first part is a general condensed discussion of epidemiology with special reference to certain diseases. The second part is the text of this pamphlet that we distributed last week on the use of the communicable disease investigation cards. The third part takes up each of the important diseases and under each gives the essential points in the epidemiology with a summary of the regulations of the sanitary code and public health law and the special regulations in regard to exclusion from school.

THE PREVENTION OF TYPHOID FEVER BY THE USE OF VACCINE.

Lecture delivered in the Post-Graduate Course in Infectious Diseases and Public Health for Physicians and Health Officers, at the Albany Medical College, March 26, 1919.

By ISAAC W. BREWER, M. D.,

Lecturer, Bureau of Venereal Diseases, New York State Department of Health; formerly Lieutenant-Colonel, Medical Corps, U. S. A.

My subject to-day is the prevention of typhoid and paratyphoid fevers by the use of vaccine.

Typhoid fever has always been the scourge of armies in the field. While at war with Spain in 1898 and 1899, in the army, there were 20,738 cases of typhoid fever, a rate of 141 per thousand and a death rate of 14 per thousand. Had the same rates prevailed during the first nine months of the World's war, there would have been 140,000 cases and 14,000 deaths from typhoid fever in our military camps.

What were the actual conditions in 1917? According to the last annual report of the Surgeon General of the Army there were during that year 297 cases of typhoid fever and 20 cases of paratyphoid fever with a total of 23 deaths from both. Most of these cases were sick when they arrived at the camp or came down with the disease very shortly thereafter. In other words they were infected prior to entry into the service. It is fair to say that during the first nine months of the war our army was practically free from typhoid fever. In New York State in 1917 there were approximately 2,800 cases of typhoid fever and about 595 deaths.

A very careful epidemiological study of the typhoid fever in the army in 1898 and 1899 was made to Majors Walter Reed, V. C. Vaughn and E. O. Shakespeare who came to the conclusion that the principal means of spread of the disease was the fly, which after visiting the open latrines which were common in the camp, adjourned to the nearby cook tent and walked over the foods left exposed.

On August 1st, 1898, I was assigned to the Second Division of the Second Army Corps then encamped at Camp Alger, Virginia, and remained with it until the latter part of October. Excepting for a few days on detached duty all of my time was spent with typhoid cases, principally in transporting them to the hospital. We sent them in farm wagons, escort wagons, ambulances and baggage cars. After twenty years, those months in the Second Army Corps are a nightmare to me; flies by the million and typhoid fever everywhere, 2,226 cases and 212 deaths.

Let me show you another picture of a camp in the same region. In May, 1918, I became principal medical officer of the Engineer Replacement, Camp A. A. Humphreys, Virginia, which is about 15 miles from Camp Alger, in fact the water supply of the camp comes from a stream that drains a portion of the old camp. From February, 1918, to January, 1919, there had been but three cases of typhoid fever of the typhoid group. A careful study of the epidemiology of each case demonstrated beyond a doubt that in every instance the man was infected before arriving at Camp. Two were sick at the time they arrived, and went immediately to the hospital. In other words Camp A. A. Humphreys was

free from typhoid fever. Why? It has been said that general improvement in sanitation, especially the water supply and the means of disposal of excreta account for the difference between the conditions in 1898 and 1918. There is no doubt but that our camps were much cleaner and in better sanitary condition than in 1898. It is to be remembered that the typhoid fever in 1898 was not spread by means of the water, but by flies. The water supply at Camp Humphreys was excellent, but there were many flies, and in the portions where the civilian workmen were quartered the disposal of feces was far from satisfactory. Many of these men, especially the colored laborers, defecated in the brush and at night they did not go far from the bunk house. There was ample opportunity for the fly to become infected and without doubt not a few of the workmen were typhoid carriers. In Alexandria, where many of these men spent their evenings and Sundays, there was a serious water born epidemic of typhoid fever, lasting from June well into August, and some of the workmen became infected.

I am sure that the real reason for our freedom from typhoid fever was that every officer and man as soon as he arrived at camp was immunized against typhoid and paratyphoid fevers.

The typhoid vaccine used in the army was made of the dead typhoid bacilli suspended in salt solution. When this vaccine was used it was necessary to give three injections at intervals of a week, the first dose containing 500 million bacilli and the second and third doses one billion each. Towards the end of 1918 the Army furnished a lipo vaccine by the use of which the immunity was conferred in one dose.

The injection should be given subcutaneously on the outside of the arm at or near the insertion of the deltoid. In Japan I have seen similar vaccines given into the subcutaneous tissue of the back. If given subcutaneously there will rarely be a reaction, but if given directly into the muscle a reaction almost always follows. The lipo vaccine becomes a little cloudy when cold but clears up immediately in a moderately warm room.

When the typhoid vaccine was introduced into the army great care was taken that it should be given properly and that no man who was sick should receive it. The result was that there was

very little opposition when the vaccination was made compulsory. During the mobilization of 1917 and 1918 there was quite a little complaint about the vaccine, but in our camp it was always traced to bad technique, or injection into the muscle or to a man who was sick when the injection was given. You can not be too careful about these points. No matter how it is given the point of injection will be tender for a few days.

No doubt most of you have seen in recent issues of the journals accounts of small outbreaks of typhoid fever in the army. There was one at Camp Greene, North Carolina and one in Cody Replacement Outfit in France. With regard to these Colonel F. F. Russell, who as you know introduced the vaccine into the army says:

“The reason why these men who had presumably been rendered immune by vaccination came down with typhoid is, of course, a matter of discussion. We have every reason to believe that the vaccination failed to protect for one or more of the following reasons: (1) That they received a continuous and overwhelming dose (Cody Replacement Outfit); (2) that some men failed to respond to the ordinary immunizing process just as some laboratory animals fail to come up to the average. The same reason explains to a certain extent second attacks of typhoid and relapses in typhoid.”

Infection or immunity depends upon the resultant of the following forces:

Resistance of the individual — R.

Virulence of the germs with which he comes in contact — V.

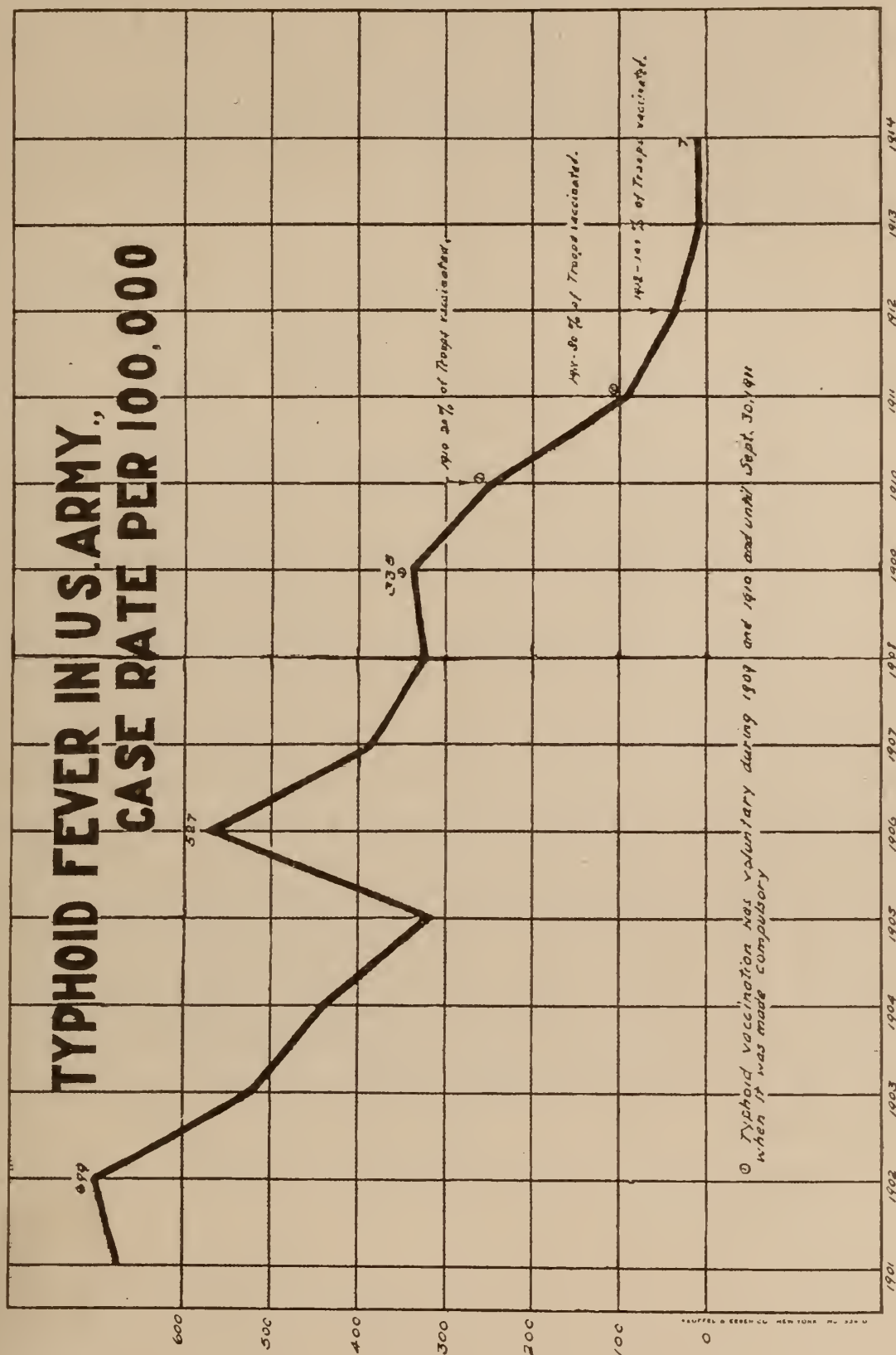
Mass of the germs — M.

Duration of the exposure — D.

If the product of $V \times M \times D$ is less than R the person retains his health; if greater than R, infection takes place.

During the period from 1913 to 1916 there were 42 cases of typhoid fever in the army, each case being studied with regard to the use of vaccine with the following result:

Had not received the vaccine.....	14.3 per cent
Had received only one dose of the vaccine.....	47.6 per cent
Had received only two doses of the vaccine....	9.5 per cent
Had received three doses of the vaccine.....	28.6 per cent



Of those who had received the three doses a number had been immunized more than three years. The army has insisted that every man be revaccinated every three years.

The value of typhoid vaccination in protecting civil communities has been shown in many instances. At Schofield Barracks, Hawaii, there was an epidemic in 1917, which illustrates the value of the vaccine.

			<i>Rate per thousand</i>
	<i>Number</i>	<i>Cases</i>	<i>Mortality</i>
Vaccinated persons.....	4,087	13.45	0.97
Unvaccinated persons	812	55.41	8.62

The persons here considered were all civilians and most of them were either Chinese or Japanese. It will be seen that amongst the vaccinated the attack rate was less than one-fourth of what it was amongst the unvaccinated and that the mortality was less than one-eighth of what it was amongst the unvaccinated.

The Chart shows the admission rate in the army before and after the use of the typhoid vaccine, which became compulsory in 1912.

In the typhoid vaccine you have a remedy that will be of the greatest assistance in the prevention of typhoid fever in your community. As has been shown it is not a sure protection against an overwhelming dose of the germs, but in the majority of cases it will afford protection. I advise you to start a campaign to get as many persons as possible vaccinated before the typhoid season is upon us. However, do not force it upon the people, and remember that the infections must be subcutaneous and given under aseptic precautions. The returning soldiers who have seen the benefits of the vaccination should be of great assistance in the campaign.

WATERTOWN, N. Y.

Editorial

ASHINO-YU.—There is Ashino-Yu village about two miles north-east of Hakone. Mountains of Futago-yama, Hozoga-dake and Komaga-dake surround the village; therefore it is situated at the highest point in Sagami. The far viewing of light shaded mountains about the horizon, may be joyfully looked at through wide unobstructed space of the sea. Purity of air will put us out of the suffering of summer's heat. On the top of Futago-yama, Futago park is opened, whence extremely fine landscape will be seen at all sides of mountain. The hotels of which the chiefs are Matsuzaka-Ro and Kinokuni-Ya, prepared for foreign and domestic visitors.

Many thermal springs gush forth abundantly here and there in wooden barrels, around which deposits a large quantity of sulphur. The temperature of the water is 45° C., when that of the atmosphere is 6° C. It is colourless and transparent; but if it be stood for a while after drown, it become opaque and tasteless, giving off a sulphurated hydrogen abundantly. If the water be examined upon metals, even brightly rubbed and polished iron tools will be rust positively and silver will become darky combining with sulphur. Its medical virtue might serve for the following diseases:

- Neuralgia caused by Rheumatism;
- Chronic Skin affection;
- Obstinate constitutional siphilis;
- Abdominal plethora;
- Enlargement of liver;
- Plethora;
- Chronic poisoning by lead, mercury etc.;
- Chronic Catarrh of larynx and pharynx;
- Bronchial Catarrh (inhalation);
- Chronic Catarrh of uterus and ovarium;
- Irregular menstruation;
- Chronic inflammation of joints;
- Remaining diseases after the wound of bone was cured;
- Paralysis;
- Hypochondriasis;
- Hysteria;
- Anoemia;
- Cholorosis;

Dyspepsia ; caused by Anoemia ;
Chronic diarrhea ;
- Leucemia ;
Scorbutus ;
Chronic dropsy caused by Anoemia ;
Trigeminal neuralgia ;
Different convalescence after long diseases.

C. J. TSCUCHIYA.

A Guide on Hakone with Thermal Springs in that Locality.



**Post
Graduate
Instruction**

Through the cooperation of the New York State Department of Health and the Albany Medical College the course in public health and infectious diseases for practicing physicians and health officers, given during the last half of the school year, has been most successful. Dr. Charles C. Duryee, state sanitary supervisor, has had the immediate direction, and after numerous conferences with other lecturers and instructors arranged the details of this course.

The leading idea has been, as it is with the undergraduate work at the Albany Medical College, to maintain an intimate, personal relation with those attending the course and to arrange the work to fill the practical daily needs as well as to supply a scientific background. As it is almost impossible for men long out of medical school to do accurately all the details of the many recent and important complicated laboratory procedures, these were, therefore, carefully demonstrated and explained to the class by numerous experts. The arrangement of the hours, one-half day each week, has, apparently, suited the convenience of the busy doctors even from the outlying districts, for forty-eight physicians have not only joined the class but enthusiastically attended almost all the exercises.

Special medical and surgical clinics have already been given by the medical and surgical department of the college at the Albany Hospital and, on request, extra clinics have been arranged.

Shortly after the end of this course opportunity will be provided for small groups of physicians to receive personal clinical instruction. The time devoted to this work will be arranged in

a manner similar to that in the post-graduate course in infectious diseases and public health above described. The general plan is as follows:

Each class is limited to a group of four physicians who report at the record room of the Albany Hospital at 9:30 or earlier each Tuesday morning. They are assigned the cases which have been admitted to the medical service during the previous week. These cases are studied carefully by the physicians and at 11:30 bedside visits and conferences are held. The physician to whom the case is assigned is regarded as the family doctor, while the other members of the group discuss the case from the standpoint of consultants. The opinions of the surgical and special services, including neurological, mental, gynecological, eye and ear, nose and throat, skin and venereal, orthopedic, x-ray, etc., are freely made use of for the full time teaching medical service acts as a clearing house for all cases not frankly mental, contagious, or surgical.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULGRAFF, REGISTRAR

BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF APRIL, 1919,

Consumption	20	Bright's Disease	10
Typhoid Fever	1	Apoplexy	12
Scarlet Fever	0	Cancer	9
Whooping Cough	0	Accidents and Violence ...	12
Measles	3	Deaths under 1 year.....	16
Grippe	17	Deaths over 70 years.....	35
Diarrheal Diseases	1	Death rate	19.46
Pneumonia	15	Death rate less non-residents	15.89
Broncho Pneumonia	16		

Deaths in Institutions.

	Non-res.	Res.		Non-res.	Res.
Albany Hospital	8	11	St. Margaret's House ..	3	0
Albany Hospital Camp .	2	4	Hospital for Incurables	1	1
County Hospital	2	4	Federation of Labor		
Homeopathic Hospital .	3	15	Camp	0	1
Maternity Hospital	1	7		—	—
Child's Hospital	2	1		26	53
St. Peter's Hospital	2	7	Births		176
Little Sisters of the Poor	1	0	Still Births		7
Public Places	1	2			

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	4	Mumps	47
Scarlet Fever	10	Pneumonia	47
Diphtheria and Croup	3	Influenza	193
Chickenpox	55	Septic Sore Throat	1
Smallpox	0	Epidemic Cerebro-spinal	
Measles	152	Meningitis	1
German Measles	0		—
Whooping-cough	15	Total	553
Tuberculosis	25		

Number of days quarantine for scarlet fever:

Longest..... 34 Shortest..... 30 Average..... 31 1/8

Number of days quarantine for diphtheria:

Longest..... 42 Shortest..... 22 Average..... 33

Fumigations:

Rooms..... 185 Buildings..... 139

Milk bottles disinfected 879

Communicable Diseases in Relation to Schools.

		Reported
		D. S.F. M.
Public School No. 1.....	.. ..	1
Public School No. 3.....	.. ..	22
Public School No. 5.....	1 ..	..
Public School No. 6.....	.. ..	1
Public School No. 7.....	.. ..	4
Public School No. 8.....	.. ..	3
Public School No. 14.....	.. ..	5
Public School No. 16.....	.. ..	13
Public School No. 17.....	.. ..	4
Public School No. 18.....	.. ..	3
Public School No. 22.....	.. ..	2
Public School No. 24.....	.. ..	2
Blessed Sacrament School .....	.. ..	3
St. John's Academy .....	.. ..	1
St. Joseph's Academy	1 ..	8
St. Vincent De Paul's School.....	.. ..	1

MISCELLANEOUS.

Cards posted for communicable disease	130	Inspections and reinspections	142
Cards removed	68	Vaccinations	0
Notices served on schools...	285	Vaccination dressings	2
Notices served on stores and factories	11	Children examined for employment certificates	12
Postal card returns sent to doctors	130	Number of employment certificates issued	13
Postal card returns received from doctors	68		

Tuberculosis.

Living cases on record April 1, 1919.....		880
Cases reported:		
By card	20	
Dead cases by certificate	6	26
		<hr/>
		906

Dead cases previously reported	14	
Dead cases not previously reported.....	6	
Removed	4	
Died out of town	1	
Recovered	0	
Unaccounted for	0	25
		<hr/>

Living cases on record May 1, 1919.....	881
Total tuberculosis death certificates.....	20

Non-resident deaths:

Albany Hospital Camp	2	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	1	
City at Large	0	
Child's Hospital	1	4
		<hr/>

Resident deaths	16
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Visits to cases of tuberculosis	68
Miscellaneous visits	14
Physicians visited	4

LABORATORY REPORT.

Diphtheria.

Initial Positive	5	Unsatisfactory	11
Initial Negative	164		
Release Positive	14	Total	236
Release Negative	42		

Sputum for Tuberculosis.

Positive	41	Unsatisfactory	0
Negative	175		
		Total	216

Widals.

Positive	4	Unsatisfactory	1
Negative	19		
		Total	24

Meningococcus.

Positive	0	Negative	0
		Total	0
Wassermann tests	212	Pathological Examinations ..	0
Milk Analyses	152	Miscellaneous Examinations	0
Water Analyses	0		
Gonorrhea Examinations ...	15	Total Examinations	855

HEALTH PHYSICIAN'S REPORT.

Cases assigned	44	Calls made	105
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DIVISION OF SANITATION.

Complaints	67	Reinspections	61
Inspections	60	Plumbing	11
Plumbing	17	Sanitary	50
Sanitary	43		

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections	121	New buildings	10
Old houses	82	Houses tested	12
New houses	39	Houses examined	21
Permits issued	63	Re-examined	74
Plumbing	50	Valid	19
Building	13	Without cause	2
Plans submitted	22	Violations	0
Old buildings	12		

REPORT OF REMOVAL OF DEAD ANIMALS

Horses removed	12	Cats removed	97
Dogs removed	44		
		Total	153

DIVISION OF MARKETS AND MILK.

Public market inspections ..	26	Lactometer readings	184
Market inspections	152	Temperature readings	184
Fish market inspections	18	Fat tests	68
Fish peddler inspections	0	Sediment tests	34
Slaughter house inspections .	2	Chemical tests	7
Rendering establishment in-		Cows examined	238
spection	0	Cows quarantined	2
Pork packing house inspec-		Cows removed	4
tions	0	Complaints investigated	3
Hide house inspections	0	Milk peddlers' permits issued	46
Milk depots inspected	14	Storekeepers' permits issued	270
Stores inspected	194	Milk houses inspected	22
Dairies inspected	22	Poultry condemned .....lbs.	12
Milk cans inspected	128	Veal condemned .....lbs.	60
Milk cans condemned	0	Beef condemned .....lbs.	30

Medical News

AMERICAN RED CROSS.—Desiring to repay, in just one more way, the nation's debt to the fighting men and at the same time to raise social standards, the Red Cross has enlisted some of the best educational minds in the country in devising an organized recreational program for the men in the government hospitals throughout the United States. Under the new regime, so varied are the activities provided, that every man has ample opportunity to spend his time in a manner both profitable and enjoyable with the result that discipline can be reduced to the minimum.

As the government has provided the best surgical skill and medical care for his physical welfare so the Red Cross is offering to him the most intelligent guidance for his leisure.

Dr. Albert K. Fretwell, head of the Department of Recreational Leadership of Teachers' College, Columbia University, has made a tour of the reconstruction hospitals, traveling under the joint direction of the surgeon general's office and under the Bureau of Camp Service, Department of Military Relief of the Red Cross. The surgeon general has requested commanding officers to expedite the work by all means possible.

The Red Cross is furnishing equipment for sports and games of all

sorts, facilities for music and reading, and securing trained personnel for leadership. The Red Cross recreation house attached to the hospital is in reality an up-to-date club possessing all the advantages of the establishment with a waiting membership list. There is a library including technical works as well as fiction and current magazines. Music has been encouraged, and many of the hospitals now boast an orchestra. All sorts of entertainments are arranged, ranging in character from the purely sociable dance to educational lectures and motion pictures. For patients who are bed-ridden, all of these entertainments are provided, in modified form or to the extent feasible and advisable. Even the movies are brought to the wards, for in some hospitals a special machine has been installed whereby pictures are thrown on the ceiling.

The Red Cross has arranged for every variety of sport in which the convalescent men can participate and acts in coöperation with the Department of Physiotherapy in order that each man, according to his therapeutic needs, may be given the opportunity for the best physical training. For men not yet strong enough to indulge in any sport there are garden tools and seeds. Automobile rides are also provided. In hospitals where amputation cases are handled there are special games for one-armed or one-legged men, into which disabled athletes enter with all the zest of former days.

Another type may make the still more pernicious mistake of thinking that because he has lost a leg or an arm or become otherwise crippled in the service of his country, that that country owes him a living, with no effort of his own. That country stands ready to give him every opportunity to take a new road in life; will stand back of him until he "makes good" and will continue his monetary compensation for life. But that country still demands and always will demand the spirit of "carry on" and the physical expression of it.

The organized recreational program which the Red Cross has put into effect in the military hospitals throughout the United States and has lately extended to the thirty-two hospitals operated by the United States Public Health Service at the request of Surgeon General Rupert Blue, creates healthful and stimulating environment. A man does not realize it, but he is something of a glorified kindergarten pupil. He is being given the chance to do those things he likes best in the way which will help him most in life.

THE NATIONAL SOCIETY FOR THE STUDY AND CORRECTION OF SPEECH DISORDER will have its summer meeting in Milwaukee, on July 4, as one of the affiliated Societies of the National Educational Association. Members of the Society and invited guests of prominence in the field of speech correction, will address the Association. Anyone interested to receive an advanced program may do so by addressing the Secretary, Miss Marguerite Franklin, 110 Bay State Rd., Boston, Mass.

CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.—The tenth meeting is to be held at the Hotel Traymore, Atlantic City on June 16th and 17th, 1919. The preliminary program has been published as follows:

Monday, June 16, 1919. 2.30 p. m.—The Congress will be opened by the President. Subject to be considered: "Surgical Aspects of Reconstruction."

Papers will be read as follows, viz.: By Dr. John M. T. Finney of Johns Hopkins Medical School, Baltimore, on "The Surgical Aspects of Reconstruction." By Dr. Harvey Cushing of Harvard Medical School, Boston, on "The Neurological Aspects of Reconstruction." By Dr. Joel E. Goldthwait, of Boston, Mass., on "The Orthopedic Aspects of Reconstruction." To be followed by a discussion by Dr. E. G. Brackett of Boston, Dr. Joel E. Goldthwait of Boston, and others.

8.00 p. m.—Address by the President of the Congress, Simon Flexner, M. D., "Epidemiology and Recent Epidemics."

To be followed by a reception.

Tuesday, June 17, 1919. 3 p. m.—Subject to be considered: "Medical and Neurological Aspects of Reconstruction." Papers will be read as follows, viz.: By Dr. W. S. Thayer of Johns Hopkins Medical School, Baltimore, on "The Medical Aspects of Reconstruction." By Dr. A. E. Cohn of the Rockefeller Institute, New York City, on "The Cardiac Phase of War Neuroses." By Dr. Pearce Bailey of New York, on "Neuro-psychiatry and Reconstruction." To be followed by a discussion by Dr. Francis W. Peabody of Boston, Dr. Thomas W. Salmon of New York and others.

8 p. m.—By Dr. Frank Billings of the Office of the Surgeon General, Washington, D. C., "The Medical Aspects of Surgical Reconstruction." (With an exhibition of films illustrating Physical Reconstruction in the Military Hospitals.)

PERSONAL.—DR. OTTO ALOIS FAUST, Assistant in Medicine, Albany Medical College, announces the opening of his office at 817 Madison Avenue, Albany, his practice to be limited to internal medicine including diseases of children.

—DR. HARRY V. JUDGE (A. M. C., '14), has returned from military service and has resumed the practice of ophthalmology.

DIED.—DR. HORACE C. WIGGINS (A. M. C. '73), died at his home at Succusuna, N. J., January 12, 1919.

Current Medical Literature

SURGERY

A New Incision for Appendectomy

LEIGH F. WATSON. *Annals of Surgery*, October 1918, Vol. LXVIII, No. 4, pp. 397.

The number of incisions that have been brought forward for appendectomy, from time to time, show that no one incision is adapted to all cases. Many writers have noted that in the cadaver the base of the appendix is found at McBurney's point, while in the living subject it is below this point, usually on a level with the center of Poupart's ligament. A number of operators have called attention to the ease with which the appendix can be removed when operating for right inguinal hernia. Since 1910, Watson has used a new incision, with its center over the base of the appendix, and believes that in many cases it is an improvement over those in general use.

Incision: A point one and one-half inches from the right anterior superior spine, on a level with a line connecting the two superior spines, is selected for the beginning of a vertical incision which extends directly downward for two to three inches to a point just above, and to the inner side of the internal abdominal ring.

Advantages: Traction to expose the appendix is avoided, because this incision, in the external oblique and its aponeurosis, the most resistant structures, is directly over the base of the appendix. It can be enlarged without weakening the abdominal wall. The ilio-hypogastric and ilio-inguinal nerves are not injured because the incision lies between them. Because this incision is made over the cecum, the small intestines do not crowd into the wound as they do when the McBurney and lateral rectus incisions are used.

MEDICINE

The Influence of Menstruation on Acidosis in Diabetes Mellitus.

G. A. HARROP and H. O. MOSENTHAL. *Bulletin of the Johns Hopkins Hospital*, July, 1918, 161.

The authors give detailed study of a very severe case of diabetes mellitus in a colored girl of eighteen years, whose tolerance for carbohydrates was unaffected by starvation. During stay in hospital she menstruated once. At the onset she complained of abdominal pain, refused food, developed hyperpnoses and drowsiness; and there was involuntary twitching of the facial muscles. Laboratory data showed increase in acidosis. With cessation of flow all symptoms of coma disappeared. During the next period while at home patient went into a state of coma and died.

Antigens Used in the Wassermann Reaction.

E. D. RUEDIGER. *Journal of Infectious Diseases*, March, 1919, Vol. 24, No. 3.

Alcoholic extract of the human heart, beef heart, and rabbit heart gave negative results with serum from fifty clinically non-syphilitic persons, while alcoholic extract of dog heart gave positive results in 32%, and alcoholic extract from guinea pig's heart gave positive results—34%. These were considered as false positives. With the serum from known syphilitics the alcoholic extract of beef heart and the alcoholic extract of rabbit heart frequently gave stronger positive results than the alcoholic extract of human hearts. The results were the same when the antigen was added fifteen minutes after the complement or fifteen minutes before the complement. Also antigen dilution of from one to thirty-five to one to seventy-five gave identical results of a dilution of one to twenty-five.

Droplet Infection and Its Prevention by the Face Mask.

GEORGE H. WEAVER. *Journal of Infectious Diseases*, March, 1919, Vol. 24, No. 3.

The author concludes that gauze will filter bacterial spray from the air if the thicknesses are in direct proportion to the fineness of the mesh and the number of layers employed. Three layers of gauze with a mesh of 40 threads or more will remove almost all bacteria-carrying droplets. Occasional fine droplets pass through. He, therefore, believes that such masks are useful when worn for protection by attendants on the sick and also when worn by the affected individual to prevent contamination of the surroundings. He emphasizes the fact that the use of masks should not lead to neglect of measures calculated to prevent transfer of infectious material by other means than by droplet spray.

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Edited by Frances K. Ray.

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ALBANY MEDICAL ANNALS

Original Communications

MUNICIPAL CONTROL OF DIPHTHERIA, INCLUDING DOSAGE AND METHODS OF ADMINISTRATION OF ANTITOXIN.

Lecture delivered in the Post-Graduate Course in Infectious Diseases and Public Health for Physicians and Health Officers at the Albany Medical College, April 2nd, 1919.

BY FREDERICK W. SEARS, M. D.,

Sanitary Supervisor, New York State Department of Health.

The diphtheria problem presents itself in two distinct ways. The problem for the physician and the problem for the health officer. There should be no serious problem for the physician at the present time for we have every facility for diagnosis and treatment. There is only one treatment for diphtheria and that is antitoxin. Still in the minds of the laity and some physicians the early use of antitoxin has not been fully appreciated. No physician who has studied this subject would ever think of delaying the giving antitoxin in any case of diphtheria. The problem to the health officer is the only difficult one. It would not be so difficult if the physician would report his cases promptly. As soon as a child has a sore throat the family should report it to the physician. We are often not able to get at these cases early and in many cases no diagnosis at all and the result is they spread the disease before we have a chance to get them under control. So in speaking from a municipal standpoint the health officer's position is entirely different from the physicians. As health

officers we are not nearly as much concerned over the severe cases as we are over the mild ones. The severe case is put under quarantine and the mild one frequently is not. You will find in your work in schools and different institutions there is where your chief trouble lies, that is, with the missed cases, because we do not get them. In the severe cases we isolate and get them under control. We know that if we take cultures of every one in a healthy community we will find about one per cent of them have diphtheria bacilli in their throats, not all of which are virulent as shown by the virulence test.

In recent work in the army camps they found only about one in ten of positive culture showed virulence so that not all carriers are dangerous. If you take a culture in a community when diphtheria is present, you will find that the ratio is considerably larger. Five or six per cent are positive, especially in camps and institutions. It is not always the finding of the morphological germ of diphtheria which gives us such great concern. Then another problem which we have to contend with is reluctance in giving antitoxin early. Schick has shown us why we should give antitoxin early. He has shown us that antitoxin has no value after the toxin of the diphtheria has entered into the cell tissues. The only way by which we can expect the antitoxin to do any good is to catch the toxin while it is still in the blood current. We must give antitoxin in the early period otherwise much damage will be produced. I do not know how it is with you, but we have often heard it said that you must continue to give antitoxin so long as the symptoms are bad. If you give a single dose of antitoxin and give a large enough dose at one time, there is no use of giving any more at all. The only time you should give more is when you are in doubt as to whether you have given enough in the first dose. Give sufficient dose at the earliest possible moment.

The question comes up as to the method of administration of antitoxin. One of the things I want to take up today is to settle in our minds what we expect to do with antitoxin. Schick has worked out a very excellent scheme for dosage. He states that in 90 per cent of cases we should give 100 units for each kilogram of weight.

1 kilogram - 2 1/5 lbs., then 1000 units should be given to a child of 22 lbs.

Double that makes 2000 units for 44 lbs. weight.

4000 units for 88 lbs.

6000 units for a normal adult of 132 lbs.

For immunizing, use one half of therapeutic dose. In laryngeal and severe cases two to four times the amount is given.

I have found in my experience of a good many years that that is practically all that is necessary in a great majority of the cases. You give antitoxin in about that proportion and if you give it early that is practically all you have to do. This brings us back to one of the points in the history of antitoxin. I happened to be health officer of Syracuse very soon after antitoxin came out, and at that time while the majority of physicians were beginning to put a great deal of faith in diphtheria antitoxin, there were some notable exceptions,—among them was a doctor on the staff of the Willard Parker Hospital in New York City who opposed it. I went down to that hospital to see what the trouble was. I found that in his wards his cases were practically all laryngeal and, of course, giving the ordinary dose did not relieve them; he was justified in his conclusion. He later became convinced as to the value of antitoxin.

How shall we administer antitoxin? I think the method a very important point. If you have a comparatively mild case, perhaps it is as well to give it subcutaneously, because in some cases you wish the antitoxin to absorb rather slowly, especially if we are afraid of anaphylaxis; so in the mild cases the subcutaneous method is fully as desirable. If you wish to get a little more rapid absorption you had better give it in the muscles.

Here is another point which I do not think the majority of people understand. If you have a fulminating case and the patient shows severe toxæmia, don't hesitate to give it intravenously. If you are going to give it by the vein you want to be a little more sure that your patient is not going to react to horse serum. Now while this condition is very rare, I don't think we should ignore it. Just warm your antitoxin to blood temperature and inject it slowly into the vein and your antitoxin effect is immediate. I wish to caution you all to make careful inquiry

regarding asthma. You should always find out if your patient is an asthmatic, because danger of a quick anaphylactic shock is great in such cases. A death occurred recently in a little child in Syracuse,—the doctor had evidently forgotten or had not thought about it, but when he inquired afterwards he found that the patient was an asthmatic. It is always wise to find out if the person to whom you are going to give antitoxin is an asthmatic and especially if they are sensitive to horse odors. If a person is sensitive you can give about one-fifth to one-tenth of a cubic centimeter, wait twenty minutes and perhaps double that dose and wait three-quarters of an hour. By this precaution the chances are your patient will be completely desensitized and you can go on giving full dose.

Then there is another method by which you can easily tell whether a patient is sensitive to horse serum or not,—that is by taking one-tenth of a cubic centimeter of any horse serum product and injecting it intracutaneously as you would for the Schick test. If you inject this amount of ordinary horse serum and wait for an hour or two, you can easily tell whether that person is sensitive or not to the serum. There is no reason why you cannot give horse products in any case if you bear in mind these points. The most important, of course, is regarding asthma. You may never encounter this condition. It has only happened once in Syracuse to my knowledge but the fact that it does happen should put us always on our guard. As I said before, the above table is a fairly good basis for the dosage of antitoxin. Do not give it every three or four hours as some suggest. Give it early and give a single sufficient dose. You can gain nothing by using more antitoxin than is necessary to unite with the toxin circulating in the blood no matter how severe the clinical symptoms may be.

The next question is, what shall be our guide in releasing these patients? The State Sanitary Code prescribes that before release, you shall have two negative cultures from the patient taken not less than twenty-four hours apart, provided that these cultures are not taken under nine days from the onset of the disease. Two negative cultures taken in this way are not always a guarantee that the patient's throat is free from the active

bacilli. Until within a year or two, the State did not require any specified time for beginning the taking of these cultures for release. The result was there were a great many cultures taken on cases very early in the disease. They were released on two negatives and it was believed that there were a great many carriers released from quarantine. In looking over our records of cases, we found that the average time in which the diphtheria germs disappeared from the throat was about twelve days. This has been the experience in other cities. The Council has, therefore, fixed the period of nine days as the minimum for taking the final cultures. The object, of course, is to reduce the number of people who become carriers of the disease. New York City Board of Health has fixed twelve days as the minimum period for taking these cultures. There are a good many reasons why two negative cultures are not a sufficient guarantee as to the absence of the germs. I was interested to learn that at Camp Sheridan all cases of diphtheria from which two negatives were secured were obliged to have a third culture taken two weeks later, the patient being kept from the camp until this culture was shown to be negative. This is to my mind a very wise precaution. It was my practice while health officer of Syracuse not to allow school children to return to school within one week following the two negatives, nor to have attendants in hospitals and institutions return to duty until after the third negative culture, taken one week following the two negative cultures. Live bacilli have been found in sections of tonsils which have been removed from carriers. There is no doubt but that the crypts of the tonsils frequently hold active bacilli which are only expelled under certain conditions and do not show at other times. This brings us to the question as to what we shall do with carriers. This has been one of the hardest propositions that Dr. Brooks has had to deal with. What are we going to do when we find carriers? Books are full of the things which have been used to clear up the throats. I do not know of anything that has so far been tried that has done any particular good in clearing up those carriers. The only treatment, outside of surgical, that has done any good has been the careful cleansing of the throat and trying to bring the mucous membrane to a normal

condition. The methods, I believe, that have been most successful are the spraying of the throat with a little peroxide of hydrogen followed by irrigation with normal saline in order to bring the throat to a normal condition. The treatment, however, which has given the best result in all large communities has been the complete removal of the tonsils. In my own experience, this has been the only satisfactory method. The removal of tonsils and adenoids will clear up in a very short time most carriers. The germ is in the crypts. The little experience that I had in one of the hospitals in Syracuse two years ago was very enlightening on that subject. In one of our hospitals in Syracuse, a hospital of fifty beds, diphtheria broke out, the first patient being an interne. We immediately cultured those he had been in contact with and found one nurse whom we took out and the trouble cleared up. It went on three or four weeks beyond the period and it broke out again in two of the nurses. I decided to culture every one in the hospital, and found that we had five people who showed positive cultures. One a cook, one maid, two nurses and one ward patient. We simply took those out of the hospital and isolated them. None of them were sick. We sent them up on the hospital grounds where they were out on the lawn having a good time. When the question came to go back, the patient went home and I required the cook, maid and two nurses to wait a week and come to the laboratory and have another culture taken. I told them if they were all right at the end of the week after the culture was taken they would be allowed to go back to work. One nurse was all right and went back, the other nurse was positive and was sent to her home to clear up. Her throat did not become free from bacilli until she had her tonsils removed about a month later. The maid's throat was negative but the cook refused to have the third culture taken, preferring to give up her position rather than to submit to the culture. The Superintendent of the hospital, upon my recommendation, refused to take her back. She attempted to get employment in other places but had difficulty in doing so because she was unable to get a recommendation from her former place of employment. She came to Syracuse five months later and applied for her old position. We still made the same

requirements regarding culture. Culture taken at that time was still positive. Her throat was apparently perfectly normal, yet she was harboring virulent bacilli for months.

For these reasons we believe people who work in hospitals, schools and food establishments should not be returned to duty upon the securing of two negatives. The removal of tonsils in the majority of cases clears up the condition very quickly.

The question has been frequently asked: Is it not dangerous to remove the tonsils in the presence of active diphtheria bacilli? We are able to answer that in the negative if the patient has passed the acute inflammatory condition. The bacilli have done their harm so far as the patient is concerned. If you are suspicious that it might be dangerous to remove these tonsils under these conditions, all you need to do is to precede the operation by a dose of antitoxin. Dr. Halstead of Syracuse relates a very interesting experience in this respect which happened before the days of antitoxin. In a severe case in which a child with diphtheria was threatened with suffocation. The question arose whether he should remove the tonsils which he believed were producing the symptoms by mechanical obstruction, or to do a tracheotomy. He reluctantly decided to remove the tonsils even though the condition was an active one. The patient made a good recovery, showing that this procedure is not dangerous even under adverse conditions.

Another question which we are frequently asked is: What is the effect of giving antitoxin in clearing the throat of carriers? None whatever. Antitoxin is simply the destroyer of toxin in the blood, and inasmuch as in the case of the carriers, we are only dealing with the bacilli in the throat over which the antitoxin has no control, we cannot expect nor do we get any beneficial results from its use for this purpose. The only instance in which we would get results from antitoxin would be in cases where we find a positive culture, in cases without clinical symptoms where we have secured the culture before the actual disease has begun.

The next question is with regard to the virulence test. Most laboratories are unwilling to make frequent virulence tests. We can readily understand why. In the first place, it is a tedious

process to isolate a pure culture which must be done. Secondly, many guinea pigs must be sacrificed in making these tests. As a matter of fact virulence tests for cases which have been clinical practically always show virulence. For this reason the laboratory will want to know when you send in a culture, as to whether the case is a clinical one or simply a carrier as found by taking a large number of routine cultures. It is, therefore, necessary in sending cultures with the request for this test that you explain clearly your reason for wishing it. For instance, it happened in one of the towns in my district last year, that an efficient, though very zealous nurse, took cultures from all the school children, there having been only one or two clinical cases in the neighborhood. She found a large number of carriers, with the result that when the carriers were isolated, a storm of protest resulted. She undoubtedly had many non-virulent cases among those reported. We do not advise taking routine cultures except for fairly good reasons. This brings us to the matter of control of diphtheria in schools. I have some pretty definite ideas from experience as health officer and sanitary supervisor regarding our method of controlling this disease among school children. If you have but one case in a school, I do not believe it calls for a complete culturing of the entire room. If you have but one case, it may be a casual case which has been brought in. This disease, we know, is transmitted either by direct or indirect contact and not through the air as the laity usually believe. It is, therefore, advisable to take cultures of those who are nearest to the actual case, that is, the one sitting on either side and the one sitting in front or back of the patient. In one instance the health officer told me that he found three of these four patient with no others in the room. If following the first case, you find other scattered about the room, or find suspicious cases upon inspection, it is wise to culture all children in the room and isolate the carriers. The carriers in this case are probably of the virulent type. Eliminate the carriers, keep your school open, have daily inspection of children and be sure the nurse looks up the absentees. Three years ago at Gouverneur, there were thirty cases in one school, the school was kept open. Upon culturing the entire school, we found these cases in groups, showing plainly the

cause was from contact. I think with rare exceptions the school should be kept open, look out for your moving picture shows and Sunday schools. I would close schools under certain conditions but it would be the last place in the community that I would close. When children are in school and you have a good nurse, you have these children under your control, you can take your cultures of suspicious cases, isolate the cases, follow up the absentees and you know where your carriers are. If you close the schools and allow the children in moving picture houses and other public places, they will do much more damage than when kept under your inspection. Other problems are,—what we shall do in large institutions, as orphan asylums, etc. The methods used are similar to those used in our schools. In addition we should learn those who are susceptible and those who are not which is very easily found out as Dr. Lawrence will tell you. In large institutions we should resort to the Schick test as this is a very simple procedure and gives most valuable information. Make the Schick test on all the inmates and you will then know positively those who are susceptible to the disease. These latter can be temporarily immunized with antitoxin. Cases showing the negative Schick, rarely if ever, develop diphtheria. The percentage of the various age periods which show a negative Schick are as follows:

At birth, 93 per cent, one to two years, about 57 per cent, twenty to forty years, about 76 per cent, from five to fifteen years, about 50 per cent.

Only last week, diphtheria appeared in Auburn prison. I talked the situation over with the prison physician who had immunized about 400 prisoners with antitoxin. I advised that he do the Schick test and only use the antitoxin for those who showed that they were susceptible to the disease. On last Monday I personally administered the test to 249 inmates. Fifty-five were positive.

In an institution the Schick test is probably the most scientific method of learning the true situation. You can take these tests and tabulate your cases for future observation. By this method you may save a large amount of antitoxin. A negative Schick

does not prove that the person may not be a carrier. We, therefore, should take cultures the same as in the other cases.

Another point which I wish to bring out is regarding the treatment of carriers. Of course, you have to isolate them. The code requires that carriers shall not handle food or be employed in positions which require their contact with children. After five or six weeks, however, they may be allowed to work under certain conditions.

In Camp Sheridan the carriers were allowed to go to work if physically able, provided they wore masks. This would be difficult to carry out except in army camps. Personally, I believe it would be safe to allow whooping cough cases to go to school if they wore masks.

What is the advantage of the masks? It prevents the saliva from carrying infection by coughing or sneezing and keeps the fingers of the patient out of the mouth. This latter, to my mind, gives a very good reason why attendants on these diseases should wear masks.

In the question of disinfection, there is little difference between diphtheria and other diseases. It is well to caution the attendants regarding everything which has come in contact with the nose or throat secretions of the patient. It is better to allow the patient to throw the soiled handkerchiefs or gauze into an open paper bag which can be burned.

We will now give a few moments for questions.

Q. 1: How long did it take for a subcutaneous injection of anti-toxin to absorb?

DR. SEARS: You get some effect almost at once, but you do not get a complete absorption under from twenty-four to thirty-six hours.

H. O. Q. 2: In the table in reference to dosage, do you use that on the first day, do you double the dose the next day, or is this unnecessary?

DR. SEARS: For the average case the one single dose is sufficient. The mild case does not progress very rapidly.

H. O. Q. 3: In reference to clinical diagnosis, don't you think it a good thing to urge physicians to give the antitoxin upon the clinical diagnosis?

DR. SEARS: Yes, if you have a case and cannot get a report of culture within a few hours, you should always do this as no harm will be done. You can always save time and perhaps save a life by giving the antitoxin early. I do not believe we should ever consider a case of sore throat as not being diphtheria until we have proved it by culture. There is no physician so skillful that he can always diagnose diphtheria by looking at the throat. You should take a culture of every suspicious case. When we can bring the laity to this view, we will accomplish a great deal in the management of diphtheria.

H. O. Q. 4: A physician said he had a boy whose brother had diphtheria, he had given 500 units of antitoxin two or three weeks before. The physician said in his judgment it was dangerous to give antitoxin to the child because he was sensitized.

DR. SEARS: To my knowledge this has never been known in a human being. It is a common occurrence in animals to be sensitized in this way.

H. O. Q. 5: My nurses find more nasal carriers than any others.

DR. SEARS: Nasal carriers are perhaps the greatest spreaders of the disease. In one of our hospitals in Syracuse the chief physician and several nurses contracted the disease from one such carrier.

H. O. Q. 6: Does antitoxin cause paralysis?

DR. SEARS: Absolutely not. The reason why we have had more paralysis in cases since the use of antitoxin is because in a large number of cases, the antitoxin has saved the life of the patient, although too late to save him from paralysis. Therefore, many of the cases which have shown paralysis would have died without the use of antitoxin.

DR. BROOKS: Another point that occurs to me and that is in regard to taking release cultures.

DR. BROOKS: You have explained about the possibility of cultures taken under satisfactory conditions of two negatives not being sufficient. Under ordinary conditions the release cultures are taken by the attending physician. In the first place a great many of them we know have a rather vague idea as to how a culture should be taken. I have seen a good many intelligent men

who do not have the slightest idea. Another point which is perhaps more important is that just as soon as the case has recovered the attending physician's responsibility ends. He is not going to go back and take release cultures. He is going to get through with it just as soon as possible. I have seen in at least one outbreak of diphtheria a large number of carriers where the release cultures have been taken by the attending physician. The point is where it is possible, perhaps where you have a public health nurse, it is always better to have all the release cultures taken by a representative of the health officer. Any intelligent public health nurse can be taught to take cultures and take them as they should be taken.

DR. SEARS: I think that point is a very strong one because the general impression among people is that anybody can take a culture but this is not true. They make a jab at the throat, do not get a satisfactory culture and then blame the laboratory for the result. I believe carriers clear up more quickly if they can be kept out in the sunlight as this favors the bringing of the mucous membrane to a normal condition.

HEALTH OFFICER: Last winter an organization from Indiana came into our city and flooded it with circulars against serum and I had quite a siege with them.

HEALTH OFFICER: I can answer that — have your city draw up an ordinance that would effect that with a penalty. I tried that a year ago. I submitted it to our attorney general and he drew up a clause and added it to our ordinance and our patent medicine man soon moved out.

DR. BROOKS: It seems to me that in an emergency you could have an injunction.

THE SCHICK TEST AND ACTIVE IMMUNIZATION.

Lecture delivered in the Post-Graduate Course in Infectious Diseases and Public Health for Physicians and Health Officers, at the Albany Medical College, April 2, 1919.

By JOSEPH S. LAWRENCE, M. D.,

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I think that my subject was "The Schick Test and Active Immunization." I have chosen to reverse it and speak first on immunization, for the Schick test is simply a test of immunization. I have outlined here a sort of scheme that would practically take up the work where I left it the other day, and follow it on until a fully immunized person is attained.

First the bacteria we spoke of are all capable of doing harm to the tissues, sometimes because of their efforts to grow and multiply, other times because of a poison they manufacture. We must remember, however, there are bacteria that help to build up tissue as well as there are others that tear it down. The typhoid bacillus can be an example having both of these qualities; they burrow holes through the intestinal wall and also seem to manufacture a substance which stimulates fat production.

But today we are vitally interested in their power to produce poison or toxin. You recall we spoke of pathogenic and non-pathogenic bacteria. All pathogenic and most so called non-pathogenic bacteria produce a toxin we now know. In some instances this toxin is excreted while the germ is still alive as is the case with the diphtheria and tetanus organisms. We speak of this toxin as being extra cellular. There is another variety which keeps the toxin within its cell and only when the cell is dead and disintegrates is the toxin liberated. We speak of this toxin as endotoxin because it is intra-cellular. These germs may secrete a toxin while living but this is usually of minor importance as compared with endotoxin. The typhoid bacillus is a type of this group.

Characteristics of toxin and endotoxin. They are both proteins. Toxin has an attractive force for any protein. This property is utilized sometimes when we give plain horse serum or rabbit or chicken serum to free the blood from toxin as for example in

some methods advocated for treating rheumatism. The toxin secreted by the bacteria is readily soluble while the endotoxin is difficultly so.

Thermolability. Both toxin and endotoxin are destroyed by heat at a temperature of about 80° C. In this they differ from chemical toxins which are not affected by heat.

Biology. The body cells respond differently to these poisons than they do to chemical poisons. If not entirely killed they produce an antibody which fixes the poison. These antibodies are produced in abundance and when not used by the toxin they are given off by the cell and circulate free in the blood. They remain in the blood serum when the blood cells are coagulated off. A blood serum filled with these antibodies is called antitoxin when it has a specific purpose as the serum from horses injected with diphtheria toxin. When the blood is loaded with antitoxin and takes up the toxin that might arise from a growth of bacteria without allowing a reaction in the person we say the person is immune to that infection, that is, the blood serum contains at all times sufficient antitoxin to neutralize the toxin introduced by that type of infection.

The damage caused by a certain amount of toxin may not always be the same in extent. This can only be explained by showing that the toxin rapidly degenerates and loses a part of its virulence. This degenerated part is called toxone. Both toxin and toxone unite with antitoxin, toxone more rapidly than toxin. This knowledge is of value when we administer antitoxin. Large doses are necessary or too much will be fixed by the toxones while the toxin will continue its action.

Standardization. Before we can use antitoxin, we must know what is a dose. This is determined for diphtheria antitoxin by producing a toxin by growing diphtheria bacilli in veal broth, filtering off the organisms and taking that amount of broth which contains enough toxin to kill a 250 gram guinea pig in four days as the standard minimum lethal dose (M.L.D.). Titrating this amount of toxin against antitoxin we shall find how much antitoxin is necessary to neutralize this definite amount of toxin. The unit of antitoxin is theoretically that amount which exactly neutralizes 100 M.L.D's. of toxin.

Immunity. There are two kinds of immunity, natural and acquired. Natural immunity is that which we normally develop as we go through the world year by year and embraces protection against a variety of organisms. After the age of five our chances of developing a case of diphtheria decrease because our natural immunity is increasing.

Acquired immunity can be of two types, passive and active. Passive immunity is obtained by injecting into the blood stream antitoxin enough to fix the free toxin, as in treating a case of diphtheria. This immunity is transient and may entirely disappear within a month after being established.

Active immunity may be achieved in two ways. The first and most common way is to have the infection, as, the immunity established by an attack of typhoid fever. The second method is to treat the person with a mixture of toxin and antitoxin. The mixture at first being entirely neutral. Three doses are given. The three doses may follow each other at seven day intervals or a month may be allowed to elapse between the first and second doses. Dr. Zinger recommends this method.

The injection should be made subcutaneously rather than intravenously so that the toxin may act for a longer time before being finally excreted. This method of establishing immunity is particularly valuable in connection with doctors and nurses. It is also recommended to immunize school children at an early age by this method. The immunity thus conferred seems to be quite permanent. Park and Zinger report no depreciation in three years.

Schick Test. This brings us to a consideration of the Schick test. We have always known that not all persons exposed to diphtheria contract the disease, but how to tell who were immune was not known and therefore antitoxin in prophylactic doses was administered to all exposed at the time of an epidemic. The technique of the Schick test is very simple and its results are most important. By this method it is possible to determine in thirty-six hours if an individual is susceptible to diphtheria or not. Outfits are now being issued containing the toxin and salt solution necessary to make up the proper mixture for performing the test. An amount of toxin equal to one-fiftieth of an M.L.D. is

diluted with one-tenth cubic centimeter of sterile salt solution and injected intracutaneously into the skin of the forearm. When properly done this injection produces a small white wheal which in twenty-four hours becomes a red spot. If the individual is immune the slight inflammation passes away as quickly as does the control which was produced on the opposite forearm by injecting the same amount of toxin that had been heated above 80° C. for three minutes. If there is no immunity the inflamed area increases until after forty-eight hours has elapsed when it slowly disappears. After eight or ten days the spot turns brown and desquamates.

This test has great value in controlling an epidemic in schools, hospitals or communities by showing who should be immunized and observed. Care must be exercised in performing the test for if the injection be made too deep the result will be negative.

THE CLINICAL COURSE AND TREATMENT OF VINCENT'S ANGINA.

BY CLEMENT F. THEISEN, M. D.,

Albany, N. Y.

While it is now an accepted fact that the finding of the fusiform bacillus with the spirillum or spirochete, in smears from throat swabs, makes the diagnosis of Vincent's angina easy and positive, it must be remembered that this bacillus is not the specific organism of Vincent's angina only, but is found also in cases of mastoiditis, broncho-pneumonia, diphtheria, hospital gangrene, throat syphilis and stomatitis. Cultures and smears usually show mixed infections with other organisms such as the Klebs-Loeffler, pneumococcus, streptococcus and staphylococcus. Mistakes in diagnosis are sometimes made because only cultures are taken, and not throat swabs. The diagnosis is easily confirmed in Vincent's if smears from the throat swabs are examined microscopically. The fusiform bacillus is practically always associated with the spirillum or spirochete. The spirochete is a thin spiral from six to twenty microns long, and two to four microns wide. The fusiform bacillus is a rod-shaped organism

from four to twelve microns in length, and two to six microns in width. Both these organisms flourish around decayed teeth, in diseased tonsils and in ulcers. Both organisms stain readily, among the best reagents being methylene blue, carbol-fuchsin and gentian violet.

The writer has always been of the opinion that bad teeth, with the attending spongy condition of the gums, are among the most important etiological conditions in cases of Vincent's angina. If cases are seen from the onset, before ulceration takes place, the entire clinical course of the disease can be studied. A thin grayish pseudo-membrane forms on the gum, particularly around a decayed molar and extends to the tonsils, and often to the mucous surface of the cheek. In a few days, unless treatment is immediately effective, a superficial ulceration forms under the membrane, and in some cases there is swelling and tenderness of the cervical glands on the same side. In the favorable cases, and if radical treatment is promptly started, the condition can be limited to one side, although in many cases it becomes bilateral.

The onset of the disease is fairly sudden, being sometimes ushered in with a chill and temperature elevation. In children this often reaches 104° and 105° F. In adults the temperature does not run as high as a rule, except in the worst type of the disease, with deep destructive ulceration. In this class of cases there is also very marked prostration, with headache and very painful deglutition. This is at times so severe that it is difficult for the patient to get sufficient nourishment. Suppuration of the cervical glands is rare, but has been seen by the writer.

In the favorable cases, the mild form, the course of the disease is not longer than from a few days to two weeks. Recurrences, in the same patient, are not unusual, and are mainly caused by neglect in correcting the underlying causes, dental caries, diseased tonsils, pyorrhoea and improper care of the mouth generally.

Halsted, in his very complete paper (Trans. A.L.A., 1912), states that there are two distinct clinical types of the disease, the one form to be differentiated from diphtheria and other nondiphtheritic pseudomembranous anginas, while in the other form localized ulceration simulating syphilis very closely is present.

In the writer's experience, the second type mentioned by Halsted occurs almost exclusively in adults, while almost all authors agree that the first type, simulating diphtheria and other membranous conditions, particularly those in which the streptococcus predominates, is far more frequent in young people.

This seems to be the simplest and best classification, although many departures from the usual clinical picture occur in both classes. The one constant symptom is the peculiarly offensive and distinctive odor, which in the severe ulcerative form is almost unbearable. The diagnosis can almost be made by that alone. The fact, that the type of the disease in children so closely resembles diphtheria, accounts for many of the mistakes in diagnosis, because in this type, cultures only are examined, and not smears from throat swabs.

In the Michigan State Laboratory, in 1909-10, out of six hundred and eighty-seven throat swabs sent in to be examined for diphtheria, one hundred and seventy-eight were not cases of diphtheria at all, but proved to be Vincent's angina. A clinical diagnosis of diphtheria has been made in two hundred and twenty-four of the six hundred and eighty-seven cases, but the bacteriologic diagnosis proved that only one hundred and twenty were true diphtheria cases.

Forty-six of the cases clinically diagnosed as diphtheria proved to be Vincent's angina.

Vincent himself found the disease in two per cent of all cases of membranous anginas.

Lublowitz found the specific organism in six out of thirty-eight cases of ulcerative stomatitis.

Rodella found them in about one-third of all the pseudo-membranous anginas he examined.

Cases of bronchitis have been reported by Rothwell (*Journal of the American Medical Association, Vol. LIV., 1910*), in which the main organism found was the fusiform bacillus.

Fatal cases are not as uncommon as is generally believed, and in children, some cases, in which a diagnosis of laryngeal diphtheria has been made, and in which the Klebs-Loeffler bacillus was not found, were undoubtedly cases of the ulcerative type involving both the pharynx and the larynx. These cases are al-

ways serious, and in children, when a pseudomembrane is also present in the larynx, are sometimes fatal.

Three fatal cases have been reported by Bruce, and others by Meyer and Halsted.

The clinical course of the disease may be best given perhaps by a brief description of two typical cases seen by the writer, one unfortunately having a fatal termination.

The first case, that of a child, aged three years, was seen from the beginning, and was of the mild pseudo-membranous form closely resembling diphtheria. The attack started with a chill, headache, malaise, and a sharp temperature elevation. Inspection of the throat showed a grayish membrane covering the left tonsil and part of the soft palate on the same side. The odor was typical, so no culture was taken, but smears showed the typical microscopical picture. If the writer had not seen so many cases of Vincent's, diphtheria would possibly have been suspected, and valuable time in starting proper treatment lost. Cervical glands enlarged and tender. The membrane could be brushed off, and underneath there was a superficial ulceration. The treatment, which will be described later, and which is always used by the writer, was started at once, and the child had a normal throat in four days. Smears taken again at this time, were negative, no fusiform bacilli nor spirilla being found.

The writer is of the opinion that all cases of Vincent's, if they could be seen from the onset, are simple and yield to treatment readily.

The severe ulcerative and fatal cases, were either not seen early enough for treatment to be effective, or as often happens, did not consult a physician until the disease was far advanced.

The disease, if not treated promptly, or if treated for some other throat condition, advances rapidly to deep destructive ulceration, often involving the entire pharynx and adjacent mucous surfaces. Most cases start, I believe, as mild pseudo-membranous forms of the disease.

The other case, was of the worst ulcerative type, and demonstrated the result of neglect of treatment. This case terminated fatally. The patient, a man, aged 31 years, walked into the office with the history of having had a sore throat for several weeks.

The odor, when the patient opened his mouth to have the throat examined, was overpowering and almost unbearable. He stated that he had received no treatment at all, and had been able to take very little nourishment for over a week.

The ulcerative process, which had evidently been going on for some time, had destroyed the soft palate, both tonsils, and there were deep ulcerations on the mucous surfaces of both cheeks and the posterior pharyngeal wall. The gums, around the last molars, which were decayed, were also badly involved. The cervical glands were large and tender. Temperature 103° F., pulse 120 and of bad quality. Patient appeared deeply toxic and was very weak. Smears from throat swabs showed the typical microscopical picture of Vincent's. He had an acute nephritis, the urine being loaded with albumen and casts. I told his family that their was little hope, and in spite of the most vigorous treatment, he died about ten days after I saw him. No autopsy was permitted. The cause of death, as it usually is in fatal cases, is the result of extreme exhaustion, toxaemia and starvation. It is impossible for patients, having such extreme ulceration of the mouth and fauces, to receive sufficient nourishment. I have no doubt that this patient's life could have been saved, if he had been seen when the disease started.

Two other fatal cases have been reported by the writer (*Transactions of the American Laryngological Association, 1918*).

There is an intermediate form of the disease between the simple pseudo-membranous form, seen usually in children, and the destructive malignant type just described. In this variety, which has usually been going on for a week or ten days, before seen by a physician, the ulcerative process is not nearly as extensive. It may be confined to only one tonsil and the mucous membrane in the immediate vicinity, or both tonsils may be involved.

These cases, while not as favorable for treatment as the simple form of childhood, practically always get well, but run a much longer course than the cases that are treated from the beginning. Both the malignant and the intermediate less serious forms, resemble the ulceration of throat syphilis so closely that mistakes in diagnosis are easy. In fact many of these cases are treated for syphilis at first. Cases occur in which there is a combination of

syphilis and Vincent's, the Vincent's probably developing in the syphilitic ulcers. The writer has seen this combination, with a positive Wassermann, and the clinical and microscopical evidence of Vincent's.

Treatment.—It is of course well known that arsenic in some form has almost a specific action in some cases. Salvarsan locally and intravenously, in bad cases, is of great service, and Potassium Iodide internally is a good adjunct to the local treatment.

Halsted, in the paper before mentioned (*Transactions of the American Laryngological Association, 1912*), has had good results with the use of enesol, an arsenate of mercury used hypodermically. Local applications too numerous to mention, have been recommended by different authors.

The writer has found that a strong solution of potassium chlorate, powdered alum, carbolic acid, glycerine and water, is almost a specific in some cases, and clears up the throat lesions quicker than anything else. It is used as a gargle, for adults and children old enough to use gargles.

In very young children it is used as a spray, the strength of the solution varying with the age of the patient.

After an attack, the mouth should be carefully examined, and all bad teeth and diseased tonsils removed.

Proper care of the mouth and throat is of the greatest importance. A twenty per cent alcoholic Seilers or Dobell's solution, if used several times daily, will not only prevent attacks of Vincent's angina, provided of course that the usual predisposing causes have been removed, but will go far in rendering immunity for most all anginas and other infectious throat conditions.

The strong carbolized astringent solution above mentioned, will in the writer's opinion, if used early, clear up the throats in cases of Vincent's more quickly than any other method of treatment. It should be used very frequently, every half hour in the severe cases, and every hour or two in the milder cases. After a few days, if the throat lesions show a tendency to clear up, it is used less frequently.

Vincent's angina is really a very common condition, and if we are on the lookout for it, will be found much more frequently than we think.

HIGH FREQUENCY ELECTRICITY IN THE TREATMENT OF ROSE COLD AND HAY FEVER.

Excerpt from a paper, "Some Points on Electro-Therapy," read before the Medical Society of the County of Albany, May 16, 1918.

By WM. G. LEWIS, M. D.

Albany, N. Y.

The subject of Rose Cold and Hay Fever is so timely that I am sure that you will be interested to know the results I have had in treating these cases with high frequency electricity.

Some years ago Sajous applied the term "hyperaesthetic rhinitis" to the conditions then, and still, designated as Rose Cold and Hay Fever. As a result of my experience in treating these conditions, and taking into consideration the results obtained, I am convinced that his designation is a perfect one, for the very good reason that the excellent results have been attained by attacking the conditions at the source that his designation would indicate—viz, the sympathetic nerve system. According to the studies of Sajous, Mackenzie and others, and of the results of my practical personal experience in treating these cases, there is little doubt that, as Mackenzie has said, "the neurotic factor is due to abnormal excitability of the sympathetic system;" and my own experience shows that treatment of the sympathetic nerve system corrects this "abnormal excitability" and results in a cure in a greater percentage of cases than any other method of treatment.

As to etiology, Sajous assigns three prime causes: (a) an organic disorder of the nasal mucosa; (b) general nervous debility; (c) an external irritant. If, for the first of these causes, "An organic disorder of the nasal mucosa" we substitute "A functional disorder of the nasal mucosa due to abnormal functioning of the sympathetic nerve," we would, I believe, be nearer the truth.

The sympathetic nerve system controls the secretory epithelium and the unstriated muscular fibres. The first is here of interest. Again quoting from Sajous: "I do not regard hay fever in its active form as a disease per se, but merely as a symptom-com-

plex of a sudden cessation of the inhibiting functions of the nerve centers presiding over the physiological processes of the upper respiratory tracts." If we can reestablish this "cessation of the inhibiting functions of the nerve centers, etc.," we will have removed the cause of the condition and a cure will have been effected. And it is just this that we have been able to do in over eighty per cent of the cases of Rose Cold and Hay Fever treated along these lines.

In those cases where the mucous membrane of the air passages is affected by various irritants,—pollens, etc.,—producing Rose Cold, Hay Fever and certain forms of asthma, we assume that the characteristic irritation is made possible by reason of a perverted secretion of the mucous membrane epithelium, due either to a "cessation of the inhibiting functions of the nerve centers" as Sajous says; or to "abnormal excitability of the sympathetic system" according to Mackenzie.

By producing a high frequency hyperaemia over the sympathetic nerve we are able to stimulate the nerves to more normal action, bringing about a more normal secretion from the secretory epithelium, and making it resistant to those substances that had heretofore been irritating, and relieving any irritation of this character that may already be present.

For the surest and quickest results the treatment should be instituted about two weeks before the date of onset. Where treatment is begun after the onset the results are equally satisfactory, but a short time—a few days—is required to control the already present inflammation. It is surprising, however, how quickly the subjective symptoms are controlled by the high frequency treatment.

It is well to bear in mind that many cases of recurrent Rose Cold and Hay Fever cease having the attacks without any treatment. In these cases of spontaneous relief, we assume that the cause has been removed; that is, the sympathetic nerve has ceased to functionate abnormally—has resumed its normal functioning. In the idea here briefly outlined for treating these cases our object is simply to do that which nature has failed to do. To attempt to cure, by medical means, any condition that is not at some times relieved spontaneously, is to my mind futile.

In all of the conditions in which we are able to give relief or effect a cure by specific medication or otherwise, statistics show that we are able to *increase* the percentage of cures, and *lower* the percentage of cases of continued chronicity or fatalities, according to the condition under treatment.

Before the discovery of the antitoxin, and when the treatment consisted solely in caring for the general condition of the patient, diphtheria demanded a toll of thirty-seven per cent of all cases. Since the use of diphtheria antitoxin has become general, we are justified in expecting recovery in one hundred per cent of the cases that are recognized during the first twenty-four hours. But even before the advent of the specific antitoxin, sixty-three per cent of the cases recovered. The conclusions to be drawn from the foregoing is obvious.

In conclusion, I shall cite a few cases.

Miss P. For twelve years this patient had suffered from Hay Fever, which persisted from the fifteenth of August until the first frost. At any time the odor of lilacs brought on an attack of sneezing and asthma. During the season that I first treated her, four years ago, she had so few symptoms that she was able to attend to her usual duties, previously impossible. She has had no treatment since and has been free from all symptoms.

Mrs. M. Was called to see this patient at 10 P. M. Asthma with extreme dyspnoea, associated with Hay Fever. Patient was unable to lie down. Gave codeia for the night, which gave only partial relief. The following morning, after much urging on my part, she came to the office in a taxi and had difficulty in getting up the steps. The following morning she came by trolley and by the third day was entirely free of all asthmatic symptoms, with great amelioration of all other symptoms, and was all right after three days more.

Mrs. C. Told me casually that she dreaded the coming month, as it always meant a period of invalidism because of Rose Cold. She demurred at taking any kind of treatment, as she had tried so many things without any relief. She did finally present herself for treatment and sneezed three times that season. Did her own canning that spring, for the first time in twelve years. Has had no recurrence in the three following years.

Many more cases could be cited, but these few will show, as well as many more, the practical side of the question. I should like to treat some cases that have had attacks for many years a

few months before the seasonal attack; for from my observations on the persistence of the good effects on those who had no recurrence in the years following treatment it seems reasonable to suppose that treatment given between attacks would tend to make the action of the sympathetic nerve more normal for a long period of time, and prevent the characteristic attacks.

Editorial

These are to give Notice, That at the Glass-Lanthorn in Plough-Yard in Gray's-Inn-Lane, still lives Susanna Kirleus, the Daughter of that Eminent Doctor Tho. Kirleus, (who was a Sworn Physician to K. Charles II, &c) who with his famous Pills and Drink cures the secret Disease, and all Ulcers, Sores, Swellings, Kings Evil, Scabs, Itch, Scurfs, Scurveys, and Leprosies, though never so great, without hindering Business, or the Use of Mercury, which destroys many; and cures any who send their Grief and Age without seeing them, having had above 20 Years Experience in the Doctor's Life time. The Drink is 3s. the Quart, the Pills 1s. the Box. She gives her Advice in Distempers, to all that write or come to her, gratis, and deals with all Persons according to their Abilities.

The Spectator.

No. 304. Monday, February 18, 1712.



The Commencement Season. Separation of the graduating ceremonies from the alumni reunion necessitates a commencement program covering two days. Last year for the first time the diplomas conferring the degree of Doctor of Medicine were awarded at Schenectady in common with the conferring of these honors upon the candidates from the academic departments of the university. The innovation was appreciated, was repeated this year, and appears to have taken its place as a permanent custom. The hope may be indulged that the schools of law and pharmacy will soon claim the same privilege. The dignity of a university commencement cannot fail of its impression upon the young men who regard this event as one of the mile-stones in their careers, and no effort is wasted which responds to the promise and prospect of youthful anticipation.

The Honorary Chancellor's address of 1918 was given by the Honorable Robert Lansing, Secretary of State, who analyzed the problems suggested by the World War, which at that time, was the engrossing topic of thought and apprehension. In 1919 this office was filled by Major-General Leonard Wood, whose address touched upon the difficulties, obligations and duties of citizenship resulting from the great upheaval of civilization. There can be no question that the influence of general discussions of this broad character is far more reaching than are the narrower admonitions, not altogether devoid of platitudes, by which the layman hopes to dissuade the youthful practitioner from the injudicious administration of pills. The commencement exercises at Schenectady are dignified, and it is with some complacency that the students and faculty of the Medical School find themselves in that time-honored procession from the "President's House to the Church," in line with the "Trustees and Candidates for Honorary Degrees, the Faculties, the Undergraduates and Alumni."

This arrangement of commencement for Monday leaves Tuesday for the Alumni, and the Executive Committee of the Association, abetted and aided by the Dean and Faculty, plan an entertainment to last throughout the day. As has been the custom from time immemorial the Alumni meet in the College in the forenoon and assemble for the annual session. This year, recess was taken for luncheon at the Colonie Club, and the Nominating Committee busied itself during this supposed period of retrenchment in canvassing the party to ascertain who might be persuaded to accept office. There seem to have been difficulties as the choice for the presidency fell upon an absentee, Colonel Thomas W. Salmon, of the Class of 1899, who has accomplished such wonderful work for his country in the neurological and psychiatric service abroad. Automobiles carried the guests to the Albany Hospital for a survey and for demonstrations during the afternoon, and in the evening the dinner at the Hotel Ten Eyck took on a new aspect in the informal presentation of a more or less technical subject. The Association was unusually fortunate in having as its guest Dr. Frederick W. Shattuck of Harvard introduced by his old friend and pupil, Henry Hun, who was

vociferously greeted by his former students. Dr. Shattuck has given attention to Industrial Hygiene, and envisages the great future of this problem not only in its economic aspects but in its demands upon medical schools. There can be little doubt that the suggestions of Dr. Shattuck will bear fruit in the near future in the admission of this study to a place in the curriculum. Professor Elting gave a word picture of armistice day in Brussels, and described in vivid phrase the pageant of that occasion, and President Richmond closed the evening in his usual felicitous manner, with an expression of enthusiasm for the future of the College, and of the mutual benefit to the College in Albany and the College in Schenectady, of their university relations. Dr. Richmond's remarks carried conviction that the half-century dream of a great university is fast becoming accentuated into a reality.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

BUREAU OF VITAL STATISTICS.

DEATHS FOR MONTH OF MAY, 1919.

Consumption	16	Bright's Disease	9
Typhoid Fever	0	Apoplexy	11
Scarlet Fever	0	Cancer	14
Whooping Cough	0	Accidents & Violence.....	9
Measles	2	Deaths under 1 year.....	15
Diarrheal Diseases	2	Deaths over 70 years.....	38
Pneumonia	8	Death rate	15.24
Broncho Pneumonia	4	Death rate less non-residents	12.28

Deaths in Institutions.

Non-res. Res.		Non-res. Res.	
Albany Hospital	9 12	Public Places	0 1
Albany Hospital Camp..	3 3	St. Peter's Hospital	3 6
Albany County Hospital	4 3	St. Margaret's House ..	1 2
Child's Hospital	1 0	Sacred Heart Convent..	0 1
Homeopathic Hospital ..	4 6		
Federation of Labor			26 39
T. S.	0 1	Births	168
Maternity Hospital	1 2	Still Births	2
Little Sisters of the Poor	0 2		

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	2	Tuberculosis	26
Scarlet Fever	23	Mumps	30
Diphtheria and Croup.....	7	Pneumonia	36
Chickenpox	51	Influenza	53
Smallpox	0	Septic Sore Throat.....	8
Measles	159	Trachoma	1
German Measles	0		
Whooping Cough	4	Total	400

Number of days quarantine for scarlet fever:

Longest.....	31	Shortest.....	31	Average.....	31
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Number of days quarantine for diphtheria:

Longest.....	32	Shortest.....	32	Average.....	32
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Fumigations:

Rooms.....	97	Buildings.....	127
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Milk bottles disinfected	414
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Communicable Diseases in Relation to Schools.

	Reported D. S.F. M.		
Public School No. 3.....	..	1	..
Public School No. 4.....	1	..	..
Public School No. 8.....	..	3	..
Public School No. 13.....	..	2	..
Public School No. 14.....	2	15	..
Public School No. 15.....	..	2	..
Public School No. 17.....	..	9	..
Public School No. 18.....	..	13	..
Public School No. 21.....	..	1	..
Public School No. 22.....	2	13	..
Cathedral School .....	..	10	..
Lady of Angels School.....	1	2	..
St. Ann's School.....	..	10	..

MISCELLANEOUS.

Cards posted for communi- cable disease	149	Postal card returns received from doctors	121
Cards removed	121	Inspections and reinspections	165
Notices served on schools..	274	Vaccinations	82
Notices served on stores and factories	5	Vaccination dressings	32
Postal card returns sent to doctors	181	Children examined for em- ployment certificates	18
		Number of employment cer- tificates issued	17

Tuberculosis.

Living cases on record May 1, 1919.....		881
Cases reported:		
By card	25	
Dead cases by certificate	2	27
		<hr/>
		908
Dead cases previously reported.....	14	
Dead cases not previously reported.....	2	
Removed	31	
Died out of town	1	
Recovered	0	
Unaccounted for	0	48
		<hr/>
Living cases on record June 1, 1919.....		860
Total Tuberculosis dead certificates.....		16

Non-resident deaths:

Albany Hospital Camp	3	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	0	
City at Large.....	0	
Homeopathic Hospital	1	4
		<hr/>
Resident deaths		12

Visits to cases of tuberculosis.....	19
Miscellaneous visits	7
Physicians visited	4

LABORATORY REPORT.

Diphtheria.

Initial Positive	31	Release Negative	66
Initial Negative	344	Unsatisfactory	6
Release Positive	45		
		Total	<hr/> 492

Sputum for Tuberculosis.

Positive	57	Unsatisfactory	0
Negative	145		
		Total	<hr/> 202

Widals.

Positive	3	Unsatisfactory	1
Negative	16		
		Total	20

Meningococcus.

Positive	0	Negative	0
		Total	0

Wassermann tests	205	Pathological examinations ..	1
Milk analyses	169	Gonorrhea examinations ...	29
Water analyses	0	Miscellaneous examinations.	0
		Total examinations ...	1,118

DIVISION OF SANITATION.

Complaints	103	Reinspections	103
Inspections	99	Plumbing	19
Plumbing	31	Sanitary	84
Sanitary	68		

HEARINGS.

Hearings	1	Cases heard	1
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Class of Cases.

Plumbing	1
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Disposition of Cases.

Reinspection	1
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DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections	90	Houses tested	12
Old houses	63	Smoke	0
New houses	27	Blue or red	6
Permits issued	37	Peppermint	4
Plumbing	30	Water test	2
Building	7	Houses examined	49
Plans submitted	7	Re-examined	89
Old buildings	2	Valid	26
New buildings	5	Without cause	23
		Violations	0

REPORT OF REMOVAL OF DEAD ANIMALS

Horses removed	8	Cats removed	77
Dogs removed	88		
		Total	173

DIVISION OF MARKETS AND MILK.

Public market inspections ..	23	Milk cans inspected	346
Market inspections	122	Milk cans condemned	0
Fish market inspections	9	Lactometer readings	194
Fish peddler inspections	0	Temperature readings	194
Slaughter house inspections.	0	Fat tests	8
Rendering establishment in-		Sediment tests	4
spection	0	Chemical tests	0
Pork packing house inspec-		Cows examined	420
tions	0	Cows quarantined	0
Hide house inspections	0	Cows removed	28
Milk depots inspected	12	Complaints investigated	4
Stores inspected	0	Milk houses inspected	25
Dairies inspected	25	Poultry condemned	12 lbs.

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—STATISTICS FOR MAY, 1919.—Number of new cases, 268; classified as follows: Charity cases, 59; cases, moderate income, 58; metropolitan, 60; prenatal (no charge for calls), 24; dispensary social service, 66; tuberculosis, 25; cases carried from last month, 131; total number of cases under care during month, 399. New cases classified according to disease: Medical, 85; surgical, 18; obstetrical—(a) prenatal, 24; (b) confinement, 29; (c) maternity, 1; no diagnosis, 4. Disposition: Removed to hospitals, 10; died, 8; discharged cured, 72; discharged improved, 64; discharged unimproved, 0; discharged to other care, 30; to dispensary, 1; number of patients still under care, 123. Cases reported by: Physicians, 12; metropolitan agents, 40; patients, families or friends, 62; nurses, 20; Home S. S. Nurse, 2; other sources, 5; dispensary, 6.

Special Obstetrical Department.—Number of obstetricians in charge, 0; number of students in attendance, 0; number of new cases this month, 0; number of nursing visits, 0.

Visits of Nurses (all departments).—Number of visits with treatment, 1,031; number of social service visits, 288; number of prenatal, visits 86; number of tuberculosis visits, 187; number of other visits, 251; total number of visits, 1,843.

Metropolitan Report.—Number of metropolitan calls, 382; number of checks received for last month's calls, \$297.60.

Dispensary Report.—Number of clinics held, 78; number of new patients, 62; number of old patients, 499; total number of patients treated during month, 561. Classification of clinics held: Prenatal, 3; surgical, 12; nose and throat, 7; eye and ear, 16; skin and genito-urinary,

8; medical, 9; tuberculosis, 0; venereal (included in skin), 0; lung, 8; dental, 0; neurology, 3; stomach, 0; pediatrics, 3; gynecological, 6. Special Tuberculosis Department.—Number of T. B. patients sent to hospital, 10; number of T. B. patients returned from hospital, 2; number of T. B. patients died, 10.

RED CROSS NOTES.—National Red Cross Headquarters has announced the formation in Paris, of the League of Red Cross Societies, the purpose of which is to unify the Red Cross organizations of the world in a systematic effort to anticipate, diminish and relieve misery produced by disease and disaster.

The objects of the League are: 1.—To encourage and promote in every country a duly authorized voluntary National Red Cross organization, having as purposes the improvement of health, prevention of disease and mitigation of suffering throughout the world and to secure the coöperation of such organizations for these purposes. 2.—To promote the welfare of mankind by furnishing a medium for bringing within reach of all peoples, the benefits to be derived from present known facts, and new contributions to science, and medical knowledge and their application. 3.—To furnish a medium for coördinating relief work in case of great national or international disasters.

The control of the League will be by general council, composed of representatives of all members of Red Cross societies meeting at designated periods. A governing board of fifteen members will be chosen by the general council to direct the affairs of the League in the intervals between such meetings. Henry P. Davison of New York, formerly chairman of the War Council of the American Red Cross is chairman of the League's first Board of Governors. Other members of the board chosen thus far are: Sir. Arthur Stanley of the British Red Cross, Comte Kergorlay of the French Red Cross, Count Frascara of the Italian Red Cross and Professor Ninagawa of the Japanese Red Cross. Geneva will be the headquarters of the League and the world health program shaped at Cannes will be further prepared.

While it is expected that the League of the Red Cross will establish intimate relations with the League of Nations it should be understood that the Red Cross League being a purely voluntary, non-political non-sectarian, non-governmental organization, it has no statutory connection with the League of Nations or with any government.

Mr. Davison commenting on the Red Cross League said:

"The Red Cross societies of the United States, Great Britain, France, Italy and Japan have for several months worked incessantly through their representatives, to devise an agency which would adequately cope with the world problems of disease and disaster. We hope it will be universal in membership. From the outset it was clear to us all that there was no institution in the world so well adapted to this task as the Red Cross because of the peculiar hold which it has upon the hearts

of all peoples, irrespective of difference of face and religion; because of the amazing development of its powers in the recent war, because of the anxiety of its membership not to lose the opportunity for service when war service was no longer needed. It is generally believed that the health problems of the world can never be solved by doctors alone, but must enlist hearty volunteer coöperation of the peoples themselves; and no organization can mobilize the peoples of divergent views as can the Red Cross. For this reason the five largest Red Cross societies have united to bring about universal Red Cross coöperation.

AMERICAN ASSOCIATION OF ORIFICIAL SURGEONS.—The 32nd Annual Convention of the American Association of Orificial Surgeons will be held September 15, 16, 17, at the Congress Hotel, Chicago. The forenoons will be given to operative demonstrations at the hospital. The program will be replete with addresses, essays and papers by prominent Orificialists.

JOURNAL OF DENTAL RESEARCH.—The prospectus of this quarterly has been issued, announcing "a journal of stomatology: devoted to the advancement and dissemination of knowledge pertaining to the mouth and teeth, and to their relation to the body as a whole. The editorial office is in the College of Physicians and Surgeons, 437 West Fifty-ninth Street, New York City. The Journal is further described as "a strictly scientific research magazine—something entirely new in dental literature" an assertion justified by its support by an endowment fund, and the editorial staff of dental, medical and biological investigators, constituted as follows:

FOR STOMATOLOGY AND DENTISTRY

M. T. Barrett, Philadelphia, Pa.; Elmer S. Best, Minneapolis, Minn.; T. W. Brophy, Chicago, Ill.; G. V. I. Brown, Milwaukee, Wis.; J. P. Buckley, Chicago, Ill.; H. E. S. Chayes, New York, N. Y.; Martin Dewey, Kansas City, Mo.; W. B. Dunning, New York, N. Y.; A. C. Fones, Bridgeport, Conn.; C. J. Grieves, Baltimore, Md.; T. B. Hartzell, Minneapolis, Minn.; Joseph Head, Philadelphia, Pa.; A. T. Henrici, Minneapolis, Minn.; T. P. Hinman, Atlanta, Ga.; P. R. Howe, Boston, Mass.; N. S. Jenkins, New Haven Conn.; J. M. Levy, New York, N. Y.; J. A. Marshall, San Francisco, Cal.; A. H. Merritt, New York, N. Y.; F. B. Noyes, Chicago, Ill.; Alfred Owre, Minneapolis, Minn.; W. A. Price, Cleveland, Ohio; M. L. Rhein, New York, N. Y.; R. H. Riethmueller, Montclair, N. J.; K. H. Thoma, Boston, Mass.; F. T. Van Woert, Brooklyn, N. Y.; J. L. Williams, New York, N. Y.

FOR THE MEDICAL AND BIOLOGICAL SCIENCES

Anatomy.—H. H. Donaldson, University of Pennsylvania; G. S. Huntington, Columbia University.

Anthropology.—Franz Boas, Columbia University.

Bacteriology.—I. J. Kligler, Rockefeller Institute for Medical Research; Charles Krumwiede, Jr., New York University and Bellevue Hospital Medical College; W. H. Park, Research Laboratory of the New York City Board of Health; L. F. Rettger, Yale University.

Biochemistry and Nutrition.—H. P. Armsby, Pennsylvania State College; E. B. Forbes, Ohio Agricultural Experiment Station; Otto Folin, Harvard University; Casimir Funk, New York City; William J. Gies, Columbia University; E. B. Hart, Wisconsin College of Agriculture; P. B. Hawk, Jefferson Medical College; E. V. McCollum, Johns Hopkins University; Lafayette B. Mendel, Yale University.

Endocrinology.—R. G. Hoskins, Northwestern University Medical School.

Evolution.—C. B. Davenport, Carnegie Station for Experimental Evolution (Cold Spring Harbor, L. I.).

Hygiene.—T. A. Storey, College of the City of New York.

Immunology.—Reuben Ottenberg, Mt. Sinai Hospital, New York City.

Medicine.—H. O. Mosenthal, Johns Hopkins University.

Neurology.—Frederick Tilney, Columbia University.

Palaeontology.—W. K. Gregory, American Museum of Natural History (New York City).

Pathology.—A. J. Smith, University of Pennsylvania; H. G. Wells, University of Chicago.

Pediatrics.—L. E. La Fétra, Bellevue Hospital (New York City); O. M. Schloss, Columbia University.

Pharmacology and Therapeutics.—J. J. Abel, Johns Hopkins University; John Auer, Rockefeller Institute for Medical Research; R. A. Hatcher, Cornell University Medical College; C. C. Lieb, Columbia University; F. H. McCrudden, Robert B. Brigham Hospital (Boston); Carl Voegtlin, United States Public Health Service (Washington).

Physiology.—Russell Burton-Opitz, Columbia University; S. J. Meltzer, Rockefeller Institute for Medical Research.

Surgery.—A. V. S. Lambert, Columbia University; John Rogers, Cornell University Medical College.

Toxicology.—John Marshall, University of Pennsylvania.

TYPHUS MENACING WORLD.—War on typhus with a view to preventing the spread of the dread malady from Poland, where 100,000 persons are down with the disease, to other countries of eastern and south-eastern Europe is planned by the League of Red Cross Societies of the World, the first great health work on behalf of humanity which the organization formed only three weeks ago, has set out to perform. News of anti-typhus plan, which is the result of a series of conferences between the Supreme Economic Council and Lieut. Gen. Sir David Henderson, director general of the League of Red Cross Societies, has reached American Red Cross Headquarters.

Reports from Poland show that thousands have died from lack of medical care and that conditions in Hungary and other parts of eastern Europe, due to the appearance of typhus, are such as to constitute a menace to the rest of the world. Surveys made on behalf of the Supreme Economic Council show that the disease is spreading rapidly and that it will take a vigorous campaign to check it before cold weather sets in. Added to the menace of typhus is the danger of a cholera epidemic in these countries, the peoples of which are still suffering from the shock of war and undernourishment.

The Supreme Economic Council has appointed a committee of British, French and Italian representatives to confer with representatives of the League of Red Cross Societies, the object of this conference being the preparation of plans that will be submitted to the governments of the countries of eastern Europe. The necessity for immediate action will be presented to these governments. For its own part the League of Red Cross Societies has addressed an appeal to its founder members, the Red Cross organizations of the United States, Great Britain, France, Italy and Japan, and to the Red Cross organizations of twenty-four other countries who have been invited to join the League, to hold themselves in readiness to participate in the campaign against typhus.

The division of duties between the League and the Supreme Economic Council has been arranged, it being agreed that the latter organization will place at the disposal of the League all the surplus medical and hospital supplies belonging to British and American armies and insure transportation of the same while the League will supply and maintain the personnel for the administration of the relief measures. The League of Red Cross Societies will also provide the best medical service and advice obtainable. In this connection the League will be in a position to use, immediately the anti-typhus plan receives governmental approval, the methods for combating typhus disclosed during the recent important conference at Cannes, where the world's leading physicians and public health experts were assembled.

In connection with the proposed campaign against typhus Lt. Gen. Henderson, director general of the League said:

"If the Red Cross League is charged with the serious responsibility of protecting public health in this crisis, the people of the various nations must realize that the fight is their own and that the League is acting as their instrument.

"The League will be put to the severest test at the very beginning of its existence. We believe that with the aid of governments, and with the aid of voluntary national societies supported by the people, we can control and limit the spread of this epidemic so that Europe will be saved from disaster that would sure follow the spread of the disease. The situation in eastern and southern Europe is too serious to be coped with by any single government or by any voluntary society. The Red Cross

League affords medium through which governments and voluntary societies can cooperate and by means of which efforts may be coordinated.

"The League has at its disposal the assistance of the most expert medical advisors, trained by practical experience in combatting typhus. It has already the help of the trained personnel of the American and the British Red Cross, both of which societies already have units in the field, and it can call for aid upon other Red Cross societies that are members of the League. It will be able to utilize under expert direction certain medical and other supplies now in Europe owned by the Allied governments and national voluntary societies. With these means at its disposal the League is prepared to undertake the strategical direction of the campaign.

"This emergency has come upon the League at the outset while it is still in process of organization, but the League has not felt that it should avoid responsibility. If the League is requested to undertake this work by the respective governments it will offer an opportunity to the people to show through their National Red Cross Societies their practical interest in common welfare. The future will depend upon the response made to that appeal. The League has no thought of over-riding national societies, on the contrary, it seeks to cooperate with them and to develop and stimulate them.

"The actual menace of typhus and cholera gives immediate opportunity to people to unite in performance of this urgent service for the world."

PERSONAL.—DR. E. GERALD GRIFFIN (A. M. C., '01), for the last two years residing in Denver, Col., has resumed practice in Albany at 544 Madison avenue.

—DR. GEORGE WARREN BEEBE (A. M. C., '07), has retired from active service in the army and will resume practice in Eau Claire, Wis.

—DR. J. LEWIS BENDELL (A. M. C., '07), has returned from military service and has resumed the practice of general surgery at 178 State street, Albany, N. Y.

DIED.—DR. GEORGE H. HOUGHTON (A. M. C., '82), died at the Champlain Valley Hospital, Plattsburgh, N. Y., June 15, 1919, after an illness of six weeks. Dr. Houghton enjoyed a large practice in Albany from the time of his graduation until his last illness.

—DR. FREDERIC A. WILLIAMS (A. M. C., '92), died from the effects of an automobile accident on May 2, 1919, aged 49. Dr. Williams served on the staff of the Hudson River State Hospital at Poughkeepsie, N. Y., for two years, and settled in New York City in general practice in 1906, at 402 Hudson street. In April, 1918, he was appointed Medical Adviser of the New York State Insurance Fund, an office held at the time of his death.

—DR. WILLIAM J. GREEN (A. M. C., '98), died at his home in Saratoga Springs, N. Y., of acute Bright's disease, on May 27, 1919, aged 53.

ALBANY MEDICAL ANNALS

Original Communications

ASSOCIATION OF THE ALUMNI OF THE ALBANY MEDICAL COLLEGE—FORTY-SIXTH ANNUAL MEETING.

The forty-sixth annual meeting of the Association of the Alumni of the Albany Medical College was held in the amphitheatre on Tuesday, June 10, 1919. The usual informal reception was held in the college library, where photographs were exhibited, and greetings exchanged between the hours of 9 and 10 A. M. Decennial class reunions were held at times arranged. The meeting was called to order by the President, Robert B. Lamb ('91) of Beacon, N. Y., at ten o'clock.

The following named members of the Association, with invited guests, students of the college, and others interested, were present: D. C. Case ('70); G. L. Ullman, Eugene Van Slyke, ('71); D. H. Cook ('73); W. C. Crombie, O. F. Kinloch, Wm. E. Lothridge, John J. McAllister, Peter L. Suits, Thomas B. Van Alstyne, Sheldon Voorhees ('79); Herbert L. Odell ('83); Robert Babcock, James W. King ('84); C. H. Moore ('87); H. F. Bonesteel, J. M. Mosher, A. T. Powell, W. R. Seeber, William Van Doren, M. J. Zeh ('89); W. H. Conley, R. B. Lamb, ('91); Wm. G. Lewi, ('92); T. W. Jenkins, J. B. Ledlie ('93); Charles Bernstein, William George, Arthur Sautter ('94); C. L. Myers ('95); H. L. K. Shaw ('96); J. J. Beard, Wm. L. Fodder, C. H. Richardson, W. E. Silcocks, ('97); J. P. O'Brien ('98); G. E. Beilby, Lester Betts, Charles Conklin, Joseph O.

DeSobe, G. H. Fish, J. H. Flynn, R. W. Ford, A. E. Garland, E. E. Hinman, H. F. King, William Kirk, Bernard Livingston, Harris Moak, G. W. Ross, W. H. Sanford, G. S. Towne, M. E. Van Aernem, W. A. Wardner, H. J. White ('99); T. H. Cunningham, Luther Emerick, N. A. Pashayan, ('01); S. S. Ham ('02); C. R. Hoffman, I. E. Van Hoesen, ('03); B. K. DeVoe, D. A. Murphy, ('04); C. W. L. Hacker, H. M. Southworth, R. C. Waterbury, ('05); T. F. Doescher, P. W. Harrig, C. B. Hawn ('06); J. L. Donhauser, Tiffany Lawyer ('07); N. K. Fromm, J. J. A. Lyons, P. V. Winslow ('08); Morris Bellin, H. H. Drake, O. A. Druce, H. B. Gillen, E. S. Haswell, Harley Heath, Capt. J. R. Hunter, Chas. J. Kelley, A. E. Pitts, W. R. Rathbun, C. E. Slater ('09); W. D. Ayer, Claude Bledsoe, P. C. Hacker, E. W. Hannock, Fred Myers ('10); Irwin Johnston, Hiram Riggs ('11); H. H. Oaksford, C. E. Stott ('12); R. B. Crain, E. H. Ormsby, F. J. Williams ('13); J. K. Crandall, F. C. Furlong, E. H. Huntington, J. S. McCormick ('14); F. E. Dean, Jr., W. L. Grogan, W. B. D. Van Auken ('15); Stanley E. Alderson, Milton Aronowitz, Daniel F. Hannon, Raymond F. Kircher, R. A. MacTaggart, E. W. Wilkins ('17); Clarence W. Barth ('18); J. O. Kiernan ('19); W. M. Baldwin, Melvin Dresbach, A. W. Elting, Otto A. Faust, L. W. Gorham, P. T. Harper, Arthur Knudson, Thomas Ordway, J. A. Sampson (Hon.); Hon. Simon W. Rosendale, Hon. Amasa J. Parker, Mr. Robert Olcott and Mr. Luther H. Tucker (Trustees); Rev. Charles A. Richmond (Chancellor).

On motion of Dr. Hinman, the reading of the minutes of the last annual meeting was dispensed with and the minutes were approved as printed in the ALBANY MEDICAL ANNALS.

Dr. Hinman moved that the President appoint a committee of three to nominate officers for the ensuing year. The motion was carried and President Lamb appointed as such committee, Dr. E. E. Hinman ('99), Dr. Alonzo T. Powell ('89), and Dr. Harris Moak ('87), and on motion of Dr. Hinman the nominating committee was directed to report during the luncheon.

A verbal report in behalf of the Executive Committee was presented, showing that two meetings had been held during the

year for discussion of arrangements for and program of the annual meeting of the Association.

The Treasurer, Dr. Robert Babcock, presented his report for the year, as follows:

TREASURER'S REPORT

CR.

Balance on hand June 1, 1918.....	\$135 62
Dues received during the year 1918.....	145 00
	<hr/>
Total	\$280 62

DR.

Various bills paid for which vouchers are presented.....	\$96 47
	<hr/>
Balance on hand June 1, 1919.....	\$184 15
Cash from Dinner Committee	26 40
	<hr/>
	<u>\$210 55</u>

(Signed) ROBERT BABCOCK,
Treasurer.

On motion of Dr. Moak the Treasurer's report was accepted.

Owing to pressure of time the President announced the annual address would be read by title and incorporated in the minutes of the meeting.

PRESIDENT LAMB'S ADDRESS.

THE RECONSTRUCTION OF THE NERVOUS.

There is now, and has been since giving title to this paper, much hesitation on my part to apply the word reconstruction to almost any thing or person. Yet no other word so completely conveys that which I have in mind that hesitancy vanishes in face of practical utility.

Long ago when in the service of the commonwealth there came to me the thought that certain occasional cases coming before me were probably susceptible of vast improvement if it were possible by personal attention and influence to build in them a new standard of thinking; in other words to so rebuild the mental attitude of a patient that his approach to the chief problem of life would be from an angle essentially different from that which had contributed to the nervous or mental breakdown.

It is manifest that when a large number is under treatment this plan, desirable as it may be in theory, is utterly impossible in real practice.

It is equally patent too that to not every patient does it offer potential good, the general weakness of the patient precluding the possibility of a continuance of that gain which may be temporarily present while protective government shall continue. So we may feel from the beginning that care in the selection of cases is necessary if treatment, be it short or long continued, is to yield results that are in any large percentage permanent and satisfactory to both patient and physician.

To specify more particularly one would say from the outset that the only patients offering satisfactory prospects would belong to the class showing naturally the possession of at least an average mental capacity. Those below this in the long run are generally destined to failure, and it must not by any means be counted certain that all cases in the average class can make enduring recoveries, though my own experience makes me sanguine as to the outcome in the greater number of patients treated.

It is useless to consider from a practical standpoint the possibilities of recovery in any patient showing symptoms of organic disorder. It is to the functional cases therefore that we must look to see a logical field of endeavor. To be more specific, one might say that the neurasthenics offer the greatest possibility. Next come the psychasthenics. Then follow certain mild types of disorder having a mild manic trend.

Occasionally there arises in other groups an individual class which has hopeful features. I have in mind now a patient, aged sixty-five on admission, who had been examined by several neurologists and psychiatrists of assured competence and diagnosed by all as a case of involution melancholia. All of these gentlemen gave a hopeless prognosis, stating that the disorder was probably progressive and that no recovery could be looked for. Upon making an examination in a distant city, I found that the diagnosticians had apparently overlooked one factor which led me, in face of the contrary opinions offered, to tell the patient's family that I considered the chances of recovery as about even.

The factor referred to was possession by the patient of an insight that, while not perfect, was so nearly so that the small errors offered a strong hope as to correction. This feeling was fully justified and in eight months time the patient had so gained that he went to his home unattended. Improvement there continued and for nearly three years now he has enjoyed his usual health, being far better, his family state, than for a number of years previous to the acute onset of his breakdown.

Now after my experience with this particular patient, as well as several others closely approximating it, I cannot feel that any acute conditions falling within the limits already set forth, can be regarded as other than hopeful, and I cannot help feeling, though the feeling is not backed by so much experience, that there are many cases of more serious import that may be partially relieved by plain psychotherapy. It is far more efficacious in the long run than any medication which we may apply.

In approaching these cases and selecting for treatment, it is my belief that the key note is touched when the question of insight is carefully determined. After considerable experience I have grown to accept this as an index which defines the severity of the disorder, though I by no means wish to establish the dictum of no insight, no recovery. Of course this position could not be momentarily maintained. Confusion, bewilderment and other conditions may so cloud the insight that it is impossible to say whether or not it is present at all. But it is safe to say, and say frankly to the friends, that no sound opinion may be ventured until this temporary condition shall have vanished.

I have now a gentleman whose family has been told by a very competent psychiatrist that the patient under good care should be well in three months or less. After a brief examination I was forced to tell the same people that I could not give any opinion as to the final outcome for the same length of time. While it might be less, I wanted the opportunity to study the case that I might know whereof I spoke. Before the three months time had expired the presence of actual delusions was detected, these seeming to be undergoing a process of fixation and systematization. At the beginning these were clouded in confusion. As the confusion cleared the delusions became apparent and it became necessary to give a prognosis far less hopeful than the one offered by my distinguished confrere.

In short it was plainly stated that longer treatment promises little, this being based on the fact that the patient in question possesses no insight whatever.

A highly intelligent woman patient asked me recently why I paid so much attention to the matter of whether she understood her own situation or not, stating in the same sentence that as long as the doctors knew all about it a further realization on her part was not required. No contradiction was made to this statement, but at another time it was intimated to her that her recovery was quite within her own wishes and that it was perfectly possible; that undirected effort and endeavor on her part were useless; that unless she was really willing to do something in her own behalf and to do it steadily and persistently and under direction she could not improve.

It is a mistaken idea to inform these patients that you are trying to bring about any reform in their mental processes. For, once this proposition is clear in their minds, there seems to arise a resistiveness which only adds to the difficulty of carrying out the treatment, for it is much easier to win in any field if no serious opposition exists.

Nearly all these patients from the outset are governed by fears of every sort and description in ranging from the mildest in some cases to actual terror in others. In acute stages of the disorder these are much more active than later on, and either directly or indirectly produce insomnia. After lying awake a night or two they fear to go to bed lest

sleep does not ensue. They are afraid likewise to take medication unless the drug habit be acquired. They fear all food lest it cause nausea and indigestion, so that from morning to night they seem governed and made miserable by phobias having little or no basis in fact.

There came under my observation last summer a woman who had lived for two years on milk and eggs. She had previously suffered great digestive disturbance and had visited specialists from New York as far west as Cleveland. One man cut off one article of diet, another restricted something else, a third did likewise. The patient followed all these directions faithfully and grew steadily worse. After a day or two's observation I told her to go to the dining room and to have a carnival of food, to eat anything and everything and as much as she wanted. Straightway she expressed fear that any such course of action as this would cause her great distress, but when assured that it was experimental and that we simply wanted to find out what she could do, and that we were present to see that no harm came her, she consented to try. A placebo was given her after the first meal and she was told that it would secure proper digestion. She suffered little or no ill effects from the meal and, though needing assurances each time before eating, she gained seven pounds the first week and thirty-two in two months, and at the present moment, so her family tell me, she has no fear of food of any description.

It is fashionable nowadays to apply various crafts as diversions and as contributory means to the recovery of nervous patients. It is true that in some cases they are a valuable aid. It is equally true that in other cases they seem to be a hindrance. The real point which one seeks to establish in a nervous type of patient is an exercise of will power as exhibited in self control. Anything that diverts from this object cannot be classed as contributory to a permanent recovery, as illustrated by a former patient who had spent a considerable part of the previous eight years of her life in various sanatoria in futile endeavor to carry out in civil life instructions there imparted. After the acute part of her illness had passed she insisted upon going home because no occupation was ordered for her. She was informed that little or none was needed, but rather that she would apply herself to creating in her own mind a feeling of contentment under conditions not pleasant. For three months she continued her importunities to leave and said that the only way she could recover was through occupation. When it was pointed out to her that this same process which she sought to renew had for years yielded no satisfactory results, she became angry. One day sitting under a tree on the lawn she inquired from me what constituted recovery. She was told that when she arrived at a point when she could sit in that same chair and read contentedly or do light occupation and not be restive under it that she would be deemed sufficiently well to go home. Four months after the modified rest treatment had been provided in an interview she said,

"Doctor, I believe there is something in what you have been preaching, and I have grown so much better under it that I am ready to follow your instructions in relation to going home." She was then told that since this view point had been reached she might go at once if she so elected, and the best of it all is that, since her departure nearly three years ago, she has not been near a doctor or a sanitarium. The statement from her family, with whom she was directed to live one year in opposition to her own wishes, is that they would not know her for the same person.

With the neurasthenics and psychasthenics the question of insight is negligible. In all other cases it is of paramount importance. The earliest endeavors of the physician should then be addressed to the question of clarifying this function. If it is possible to create a question of doubt in the mind of his patient as to the reality of his false beliefs, one may consider that actual progress has been made. This cannot be done in a hurry nor by a direct statement that the ideas held are not warranted by the facts. But it can be done by indirection and of late I have come to believe, paradoxical as it may seem, that there is such a thing as reasoning with the partially unreasonable.

These patients (neurasthenics and psychasthenics) sense the error of their beliefs and further that for some reason they are unable to rid themselves of them, constant assurances of eventual health is necessary to allay the distress they cause and this very same assurance given with reason behind it makes light the sufferings of the patient. Necessarily this relief is only temporary, but if it is sound reasoning to assume that profound depression with agitation closely akin to terror acts as an exhaustive and impediment to recovery, is it not fair to assume that a lessening of this condition, even if it be of brief duration each day, may be deemed as contributory to improvement?

With sleep absent no great gain may be expected, as insomnia is one of the earliest and persistent symptoms. In a number of cases sleep could be had save for the governing fear that no sleep will come. In the early stages of the disorder it is justifiable to use some hypnotic in sufficient doses to give rest and with the assurance that the medication is certain to give sleep and that by its use no drug habit can be acquired. As time lapses it may be gradually withdrawn, the patient in the meantime having reestablished the habit of sleeping and is likewise secure in the belief that by aid of medication he may be comfortable. Frequently it is possible to have the sufferer sleep as well on sugar of milk as on a real hypnotic, but take away his medication too early, even if it be only sugar of milk, and sleepless nights ensue. The patients then are plainly dependent on outside agencies rather than on their own strength. By day it is their doctor, by night it is their doctor's prescription. By gaining strength the feeling of dependence disappears, and the patient requires less and less personal attention. But at the outset it is imperative

for early recovery that he have immediate and personal attention as often as is required; for this you may all be assured there is not at present any adequate substitute. Given freely it is the most satisfactory treatment known, yielding comfort and early recovery where actual medication by drugs gives little or no result.

DEAN ORDWAY'S REPORT ON THE CONDITION OF THE COLLEGE.

The Dean, Dr. Thomas Ordway, in addressing the Alumni, stated that he considered it not only his obligation to present a report of the year's activities at the annual meeting of the Board of Trustees, held shortly before Alumni Day, but that he regarded it an opportunity, as well as an obligation, to make a similar report to the Alumni. Referring to finances, he stated that during the past year special gifts and pledges, amounting to \$25,480.97, and a bequest of \$500, had been received. After briefly reviewing the activities of the Albany Hospital—Medical College Base Unit No. 33, letters of appreciation for the work of the unit from the Red Cross and Surgeon General of the Army were read.

Dr. Ordway stated that Dr. Horace J. Howk, Superintendent of the Metropolitan Life Insurance Company Sanitarium, Mt. McGregor, and Dr. Charles G. McMullen and Dr. Warren B. Stone of Schenectady had been appointed on the teaching staff of the college, that arrangements had been made for teaching at the emergency hospitals of the General Electric Company and American Locomotive Company, at the Ellis Hospital and the Research Laboratory of the General Electric Company. These emergency hospitals offer a large and varied number of industrial accident cases, the most serious being followed up at the Ellis Hospital, while the Research Laboratory of the General Electric Company offers unexcelled facilities for instruction in theory and technique of the X-ray and for research. Dr. L. W. Gorham and Dr. C. B. Hawn have been appointed clinical professors in Medicine; Dr. O. A. Faust, instructor in Medicine; Dr. Richard A. Lawrence and Dr. Frank J. Williams, instructors in Pediatrics. Mr. Arthur S. Bedell, instructor in Public Health, resigned to accept a position on the Red Cross Public Health Commission to Greece.

An unusually large proportion of the teaching staff were engaged during the greater portion of the past year in active military service and the names of these men were read at the Alumni meeting last year and were indicated in the annual announcement. All credit and honor should be given to these men for unselfishly serving their country in time of need. Those teachers who remained at home to keep the school together and continue its function of producing competent doctors, should also be commended. They were shorthanded, overworked, mentally depressed and received no official recognition. Some of these men gave up un-

usually attractive opportunities for military service in those branches for which they were especially fitted. Among others, the following men should be particularly mentioned: Drs. John A. Sampson, John M. Berry, Arthur H. Stein, Otto A. Faust, W. M. Baldwin, Melvin Dresbach, Arthur Knudson and George S. Graham.

The Dean spoke of the more intimate relation of the Medical College with Union College, and referred particularly to the two "smokers" during the past year; one held in Schenectady at which Dr. Willis R. Whitney spoke of the research work that the Naval Advisory Board had done on submarine detectors; and the second meeting in Albany at which the faculty of Union College were entertained by the staff of the Albany Medical College. At this meeting, Dr. Arthur W. Elting spoke of his observations while engaged in war work in France and England. The close relation of the two faculties was also shown by a joint meeting at which the courses of the two premedical years at Union College were revised in a most satisfactory manner. Furthermore, arrangements were made for all of the Medical College students in the Student Army Training Corps to live in the student barracks at Union College, and they were actually inducted into the service of the United States, as members of the Student Army Training Corps, with students of Union College.

Attention was called by Dr. Ordway to the remarkable work during the influenza epidemic that the medical students did for the people in district work and in the hospitals of Albany, Schenectady, Troy and Pittsfield. While thus engaged, two of the students lost their lives from pneumonia following influenza,—Mr. Lloyd E. Miller of the fourth year class, and Mr. George O. Gilman of the third year class.

The course in Public Health, given by the cooperation of the Albany Medical College and the State Department of Health, was entirely re-organized during the past year, one of our graduates, Dr. Charles C. Duryee, being appointed director. The title of this course was changed at the suggestion of Dr. H. M. Biggs, Commissioner of Health, to "Post-Graduate Course in Infectious Diseases and Public Health for Physicians and Health Officers." Forty-six physicians and health officers registered for the course which was arranged to combine certain clinics and conferences as well as lectures and laboratory work. So successful was this course that, at the request of several members, a post-graduate course in clinical medicine will be given throughout the next session.

The attention of the Alumni was called to the excellent record of students in the State Board examinations. Among the students graduating in 1918 there were no failures. The satisfactory educational conditions are, furthermore, shown by the fact that all members of the third year class also have satisfactorily passed the preliminary State Board examinations.

A plea was made for better facilities, for the students, for recreation, including social activities, board and lodging, and for study.

Lantern slides were shown demonstrating to the Alumni the excellent new apparatus, furnishings and equipment of the various laboratories, and architectural drawings and photographs by Mr. J. L. Dykeman of the rare beauty of the design of the old school building. It is thus hoped that, by this labor of love of Mr. Dykeman, this fine old building now over 104 years old and rapidly undergoing physical disintegration may in the near future be perpetuated, at least in part architecturally and in the sentiments of its best traditions, in a new building on New Scotland Avenue near the new State Laboratory and the Albany Hospital.

The report of the Historian of the Association, Dr. Bedell, was then presented and ordered entered on the minutes.

REPORT OF THE HISTORIAN, ARTHUR J. BEDELL, M. D.

Mr. President and Members of the Alumni Association: Your historian regrets his inability to be present and again calls attention to the importance of changing the Alumni date, as it conflicts with the meetings of the National Medical Societies. The year now closing has been an important one for our Association, not only in the accomplishments of our members, the additions to our Association, but, because so many of our number, after more or less active military life, have decided to become specialists rather than remain staid and solid general practitioners. Economically, this seems to me to be one of the most important changes wrought by the war on the medical men of the world. We all know that very few physicians have been improved as healers of the sick by their army career. Some have frankly stated that they were less fitted for daily practice, so the need of post-graduate study is therefore greater now than ever before and your historian suggests cooperation directed toward supplying this need.

The military history of our Alumni Association now in process of completion, will be of unusual interest for many reasons. Our Alumni have proven the value of their instruction, the quality of their manhood and their loyalty to our country by responding to the calls and demands on energy and time. Many who would like to have been in service were kept at home by the urgent need of draft boards. Years will pass before the proper value can be placed upon each individual's actual part in this great conflict, but today some of us of the stay-at-home group, giving full credit to those who left home, still do not feel that our efforts were of no avail. Our Alumni have held high places as the heads of the mental division, base hospital groups, evacuation hospitals, state mobilization, medical advisers and so on down the list. Gentlemen, the old school

may with great satisfaction refer to this record and for years to come effectively combat all arguments against our continuance in this vital function of making good physicians. Until our record is complete, always remember that our Alumni have fulfilled the expectations of their teachers. It is impossible to give the data as to the number of our members who lost their lives in the work. Following is a list of our members who have died in service:

Dr. STEPHEN J. H. REED ('07), Fultonville, N. Y., killed in action October 21, 1918.

Dr. ARTHUR H. WHEELER ('12), Troy, N. Y., died of pneumonia while in service at Camp Kearney, October 27, 1918.

Dr. EUGENE F. HULL ('13), Berlin, N. Y., died while in service at Little Rock, Ark., October 18, 1918.

Dr. WHITNEY H. JOYCE ('13), Unadilla, N. Y., died from wounds in France, May 17, 1918.

Dr. JOHN D. ARNETT ('14), killed in action in France, April 16, 1918.

Dr. MATTHEW OLSTEIN ('16), Peekskill, N. Y., died from wounds October 1, 1918.

Dr. RALPH W. TURNER ('17), died of pneumonia while in service at Ft. Oglethorpe, Ga., October 18, 1918.

Despite the handicaps of war, yesterday we graduated twelve men. They are thoroughly competent and will, I am sure, always look with pride upon their Alma Mater and I sincerely trust will always work to uplift and honor her. To our youngest members, we extend our congratulations on the completion of their course and upon the opportunity to now enter into the constant field of study and observation to the end of curing and preventing sickness. May they always work, remain true to ideals of work and not words, of devotion to their patients, not search for money, which always destroy the higher things in a physician's life. Finally, may they receive the greatest satisfaction on this earth, that of doing good, living good, and teaching goodness. We all welcome them and urge them to become active members in this Association that can be of so much mutual help.

During the year forty of our Alumni have died.

NECROLOGY

Dr. ZINA G. HARRINGTON ('57), Mankato, Minn., September 10, 1918, aged 88.

Dr. CHARLES B. TEFFT ('65), Utica, N. Y., October 31, 1918, aged 80.

Dr. MERRITT B. FAIRCHILD ('68), Syracuse, N. Y., May 17, 1918, aged 79.

Dr. HARRIS J. CORNISH ('70), Walworth, N. Y., April 14, 1919.

Dr. WILLIAM H. KINNAR ('70), Dubuque, Iowa, September 9, 1918, aged 74.

- DR. JOSEPH H. BLATNER ('72), Albany, N. Y., October 27, 1918.
DR. ISAAC H. LENT ('73), Middletown, N. Y., October 20, 1918, aged 72.
DR. HORACE C. WIGGINS ('73), Succasunna, N. J., January 12, 1919, aged 74.
DR. WILLIAM A. HALL ('75), Minneapolis, Minn., April 12, 1919.
DR. WILLIAM J. DONALD ('77), Riverside, California, March 18, 1919, aged 83.
DR. ERASTUS A. TAYLOR ('80), Schuyler Lake, N. Y., March 12, 1919.
DR. FRANK E. SIMONS ('80), Canajoharie, N. Y., October 1, 1918.
DR. THOMAS HAYS ('81), Deland, Fla., December 27, 1918.
DR. GEORGE HUDSON ('82), Stillwater, N. Y., January 30, 1919.
DR. WILLIAM B. MELICK ('84), Fort Edward, N. Y., November 8, 1918.
DR. GEORGE E. SWIFT ('84), Hudson, N. Y., May 31, 1918, aged 58.
DR. HERMAN V. MYNDERSE ('87), Scotia, N. Y., March 5, 1919.
DR. FRANK T. STANNARD ('88), Troy, N. Y., October 29, 1918.
DR. MYRON E. STEPHENS ('88), Gardiner, N. Y., October 29, 1918, aged 55.
DR. CHARLES G. BRIGGS ('89), Schenectady, N. Y., March 2, 1919.
DR. JAMES H. TOBIN ('90), Pittsfield, Mass., June 6 1918, aged 50.
DR. CHARLES N. VAN DENBERGE ('97), Philadelphia, Pa., January 22, 1919, aged 41.
DR. LEWIS T. GRIFFITH ('97), New York City, April 8, 1919, in France.
DR. WILLIAM H. YOUNG ('99), Starkville, N. Y., October 14, 1918, aged 39.
DR. JOHN W. BURNS ('01), Watervliet, N. Y., March 29, 1919, aged 40.
DR. CHARLES E. COLLINS ('06), Rensselaer, N. Y., October 14, 1918.
DR. LEMON D. WASHBURN ('06), Farmingdale, N. Y., date unknown, aged 38.
DR. STEPHEN J. H. REED ('07), Fultonville, N. Y., killed in action October 21, 1918.
DR. WILLIAM F. CONWAY ('09), Albany, N. Y., November 1, 1918, aged 31.
DR. WILLIAM H. MASON ('11), Gloversville, N. Y., aged 33.
DR. WILLIAM F. RAFFERTY ('11), Rensselaer, N. Y., January 15, 1919.
DR. ARTHUR H. WHEELER ('12), Troy, N. Y., at Camp Kearney, Cal., October 27, 1918.
DR. IRA C. WHITEHEAD ('12), Hoosick, N. Y., October 27, 1918, aged 32.
DR. WESLEY M. ADAMS ('13), Schenevus, N. Y., October 15, 1918.
DR. LEWIS W. BURDICK ('13), Maryland, N. Y., October 21, 1918, aged 36.
DR. EUGENE F. HULL ('13), Berlin, N. Y., in service, at Little Rock, Ark., October 18, 1918.
DR. MATTHEW OLSTEIN ('16), Peekskill, N. Y., of wounds, October 1, 1918, aged 24.

DR. FRANK P. SCHNEIDER ('16), Rochester, N. Y., December 31, 1918, aged 28.

DR. RALPH W. TURNER ('17), Ft. Oglethorpe, Ga., October 18, 1918.

DR. FREDERICK A. WILLIAMS ('92), New York City, May 1, 1919, aged 48.

CLASS OF 1839.

The members of the Class of 1839 were:

JARED BASSETT, Evanston, Ill., died May 10, 1905, aged 91.

GILBERT H. BROWNELL. Never located.

HENRY CARTER. Never located.

ALFRED COOK. Never located.

ANDERSON S. DEAN. Never located.

NAHUM P. MONROE, died April, 1873.

JOHN V. NEWMAN.

MARCUS T. PEAKE.

WILLIAM H. SNYDER, Troy, N. Y., died Nov. 19, 1901, aged 87.

ELMON P. EDMONDS. Not located.

REAL STRICHLAND, Enfield, Conn., aged 89, died December 5, 1903.

PHINEAS H. STRONG, Buffalo, N. Y., died February 10, 1890, aged 73.

JOHN VOUGHT, Freehold, N. J., died May 21, 1882.

CLASS OF 1849.

The members of the Class of 1849 were:

ARLINGTON BOYCE, East Schodack, N. Y., died April, 1896, aged 73.

GEORGE W. CONKLIN. Not located.

SIMEON CURTIS. Not located.

DANIEL G. DODGE, died December 30, 1877.

JOHN DUFFIN. Not located.

WILLIAM FITCH, Dryden, N. Y., died September 14, 1893, aged 74.

ABRAM GROESBECK, Chicago, Ill., died November 25, 1884, aged 74.

THOMAS C. HOWES. Not located.

SAMUEL INGRAHAM, died.

STEPHEN C. JOHNSON, Luzerne, N. Y., died January 27, 1903.

JAMES D. JONES, died December 31, 1879.

EDWARD McCAMUS, died.

OLIVER B. NELSON. Not located.

ADELMAN D. NORTH. Not located.

ALLEN F. PATCH. Not located.

JAMES H. SCOON, died July 22, 1880. Amsterdam, N. Y.

RENSSELAER R. SHERMAN. Not located.

S. MOSLEY SMITH, died April 25, 1889.

PAUL T. TABOR, died.

GEORGE M. TEEPLE, Bridgeport, Conn., died September 6, 1888, aged 65.

SAMUEL O. VANDERPOEL, New York City, died March 12, 1886.

WILLIAM C. WEY, Elmira, N. Y., died June 30, 1897, aged 68.

ALLYN WHEELER. Not located.

LOTHROP H. WILLIS, Brooklyn, N. Y., died January 2, 1885, aged 61.

CORNELIUS S. YOUNGLOVE. Not located.

IRA ZEH, died May 15, 1872.

CLASS OF 1859.

The members of the Class of 1859 were:

NEWTON H. ADAMS, died at Washington, D. C., November 17, 1869.

CHARLES H. ALLEN, died 1875.

HARVEY N. AUSTIN, Pendleton, Ark. Not located.

JOHN BIRDSALL, Newburgh, N. Y., died 1863.

JEPHTHA R. BOULWARE, Albany, N. Y., died October 17, 1887.

CHARLES H. BURBECK, Troy, N. Y., died May 9 1914.

HENRY H. CARPENTER, Lawrenceville, N. Y., died May 30, 1916.

LESTER R. CARRIER. died 1860.

NORRIS M. CARTER, Brooklyn, N. Y., died August 11, 1893, aged 55.

DAVID CURRY. Not located.

EVERITT J. LAWMAN. Not located.

NELSON FANNING, JR., Catskill, N. Y., died December 17, 1904.

MAHLON FELTER, died October, 1905.

GEORGE H. FOSSARD, Brooklyn, N. Y., died May 10, 1907.

S. H. FRENCH, 40 Church St., Amsterdam, N. Y.

ADDISON S. HARLOW. Not located.

JAMES M. HARPER. Not located.

WILLIAM A. HERRICK. Not located.

HENRY L. HORTON, Rome, Italy, died February 24, 1885.

WILLIAM M. HUGHES. Not located.

NATHANIEL JENNINGS, Gunnison, Colo., died 1898.

STEPHEN P. JOHNSON, New Haven, N. Y. Not located in 1909.

WILLIAM E. JOHNSON, Waverly, N. Y., died December 12, 1912.

WILLIAM A. MADILL.

MARTIN L. MEAD, Highland, Colo., died September 5, 1899, aged 65.

CORNELIUS D. MOSHER, Albany, N. Y., died September 26, 1890, aged 61.

JOHN T. MYERS. Not located.

REUBEN F. PARKHILL, died January 25, 1906.

JOHN SHIRIFF. Not located.

ELI SMALL, JR., Excelsior, Minn. Not located.

DANIEL SMALL, St. Johnsville, N. Y., died 1891.

CHARLES H. SMITH, died December 29, 1859.

IRA SMITH, Bath, N. Y., died May 26, 1905.

GEORGE SPAFFORD, Cavendish, N. Y., died June 18, 1906.

JAMES SWEENEY, Brooklyn, N. Y., died February 18, 1892, aged 54.

WILLIAM H. THOMSON, 23 East 47th St., New York City. Not located in 1919.

WILLIAM B. TOOLE. Not located.

LYMAN M. TUTTLE, Holyoke, Mass., died April 26, 1897.

S. HOWARD UDELL. Not located.

JOHN J. VAN RENSSELAER, New Brighton, N. Y., died June 18, 1911, aged 75.

ISAAC L. WELSH, died June 23, 1878.

THEODORE C. WHITE, Rochester, N. Y., died 1903.

As far as our records show, the entire Class of 1839 and 1849 have passed away.

Dr. S. H. FRENCH, Amsterdam, seems to be the only survivor of the Class of 1859.

The following historians will report on their respective classes:

Class of 1869—Dr. WILLIAM H. MURRAY, Albany.

Class of 1879—Dr. SHELDON VOORHEES, Auburn.

Class of 1889—Dr. WILLIAM VAN DOREN, Mechanicville.

Class of 1899—Dr. EUGENE E. HINMAN, Albany.

Class of 1909—Dr. CHARLES J. KELLY, Cortland.

Respectfully submitted, ARTHUR J. BEDELL.

HISTORY OF THE CLASS OF 1869.

My dear Doctor: I have written to all my classmates supposed to be alive and have heard from only one, Dr. Davison of South Bethlehem. The letter I sent to Dr. Deyoe, Westhill, N. Y., returned to me marked "Dead." Out of twenty-eight who graduated eighteen are dead, two not located, and as far as we know eight are alive.

WM. H. MURRAY, '69,

Historian.

CLASS OF 1869.

The members of the Class of 1869 were:

GEORGE G. BOSWORTH, died January 16, 1873.

JACOB M. BRIGGS, died January 24, 1875.

OLON BRIGGS, 139 S. Euclid Ave., Pasadena, Cal.

EDWARD A. CARPENTER, Cambridge, Mass., died June 24, 1915, aged 68.

JAMES R. DAVIDSON, South Bethlehem, N. Y.

GEORGE A. DEYOE, Westhill, N. Y.

ISAAC DEZOUCHÉ, Gloversville, N. Y., died February 22, 1895, aged 72.

ADRIAN J. EBELL, died.

P. E. FENNELLY, 216 23rd St., Watervliet, N. Y.

JAMES M. GRIFFIN, Brooklyn, N. Y., died.

ADELBERT HEWITT, Saratoga Springs, N. Y., 268 Argyle Road, Brooklyn, N. Y.

ROBERT M. HUNT, Nevada City, Cal., died.

DAVID A. LAWTON. Not located.

REVILLO T. LONGENDY, died.

CARL G. METCALF. Not located.

WILLIAM MORGAN, 25 Lake Ave., Albany, N. Y., died November 7, 1898, aged 56.

WILLIAM H. MURRAY, 374 Hudson Ave., Albany.

GEORGE E. PAUL, Granville, N. Y.

HENRY G. REID, Westernville, N. Y., died October 23, 1888.

IRVING C. SCHUREMAN, Tom's River, N. J., died August 6, 1899, aged 60.

HERBERT SHURTLEFF, died April, 1882.

JOHN SMITHWICK, Sharon, Mass., died May 21, 1905, aged 66.

JAMES H. STRUBLE, Passaic, N. J.

FRANK STURDEVANT, died.

ANDREW W. VAN SLYKE, Coxsackie, N. Y.

ALFRED L. WANDS, died.

JOHN J. WARD, Ellenville, N. Y., died May 22, 1909, aged 75.

PHILIP J. ZEH, Gilboa, N. Y. died February, 1889.

HISTORY OF THE CLASS OF 1879.

MR. PRESIDENT AND ALUMNI: At the end of four decades, it is my privilege to report the fourth time for the class of 1879. Time has proven that they were selected with care. I recall an incident concerning one of the apparent frail ones of that class. Frail only from the physical point of view. One of the examiners remarked that he thought he would do in some place where the work was not too hard. I do not recall any criticism of his class work and now he writes that he feels as vigorous as he did forty years ago.

Every one of the class of 1879 has been and is now grateful to the Albany Medical College for the training they received here. Their only regret is that they did not get more.

During the first ten years the class lost three by death; in the second ten, three, one was drowned; in the third ten, eight; and in the fourth ten, nine, leaving twenty of the original forty-three. Of these twenty, for two we have no address, one did not reply to our letters. The other sixteen have written letters that have placed me under a lasting obligation to them.

Dr. GEORGE M. ABBOTT, Saranac Lake, N. Y., writes: "I am glad to be reminded, I am still at the head of the list. I came to the Adirondack mountains in 1900, after contracting tuberculosis in the Hudson Valley. It took me three years to recover. After that my health was good until 1917 when I had a breakdown in the form of a hemiplegia.

"I improved slowly for six months and then gradually got back into practice. I have been fairly successful.

"My family consists of my wife and one daughter, 33 years of age. She is a trained nurse and doing good work."

Dr. E. A. BARTLETT, 20 South Hawk Street, Albany, N. Y., writes: "I am alive and young as I was in 1879. My health has been almost perfect and I have been fairly busy from year to year. I do very little general practice and give a good deal of time to electro-therapy which eats up time.

"My good wife is still here though suffering a left hemiplegia requiring a nurse the whole time. We have one child, a son, married and living in New York City. Thus endeth the lesson."

Dr. W. C. CROMBIE, Mechanicville, N. Y., writes: "Still doing business and in good health. I shall certainly be at the class reunion."

Dr. O. F. KINLOCH, 16 4th Street, Troy, N. Y., writes: "Nothing startling has occurred to me in the last ten years. My chest line—at the waist—has grown some but I wear the same size hat. I went in the U. S. service as a Captain of the M. R. C. and have been honorably discharged. Served at the Base Hospital, Camp Upton. I expect to be with the boys on class day."

Dr. O. J. HALLENBECK, Canandaigua, N. Y., writes: "This writing about one's self is rather delicate business, when we take in consideration the number of shortcomings that we can recall in an active practice of medicine for forty years.

"However I have done some things that I hope will give me an average standing with my classmates. First of all I have been blessed with good health. Some recreation and diversions for both mind and body have found a place in the exacting grind of medicine. We have owned a cottage on Canandaigua Lake for many years. Three boys and one girl enjoyed the benefits and blessings of that enterprise. Now all are married and have homes of their own. Our daughter married Dr. Eastman, and lives in Erie, Pa., and our oldest son, Dr. Clive E., married a nurse and lives in Dunkirk; the other boys live in Canandaigua.

"I gave much time and energy to establishing the first County Laboratory in the State, as well as the first Tuberculosis Sanitorium. I am associated with both hospitals in our city. Have been on the Board of Education for twenty-seven years (have now resigned), and have been Health Officer for this city for more than a score of years. I am elder of the Presbyterian Church, and also President of the Board of Trustees. I am surgeon for the New York State Railways Electric line, also for the N. Y. C. R. R.

"I am still quite a busy one, but if any of the boys of the class of '79 will honor me with a visit, we will go over to the club and have an interesting game of billiards, and a genuine game of duplicate whist. Come

and see me at my home in Canadaigua, boys, and do not postpone the visit too long for I am sixty-six years old."

Dr. HENRY LEWIS, Argyle, N. Y., writes: "I am fairly well and still doing business at the same old stand. I hope I may continue for a few more years. I am sorry that our number is growing more and more rapidly less."

Dr. W. E. LOTHRIDGE, Watervliet, N. Y., writes: "I am still in my old location in active practice. While I cannot say that work and I agree as well as of yore, yet I can say in the words of the late Col. Roosevelt, 'I feel bully.' I have not acquired great wealth but I have enough to keep my family comfortable. I lost my first wife some years ago and have married another by whom I have a son. He bears his father's name and makes things lively in our home.

"I expect to be at commencement and meet many of the boys of forty years ago."

Dr. E. W. MASTEN, East Greenbush, N. Y.: Retired from active work.

Dr. JOHN McALLISTER, 43 West 48th Street, New York City: "I am still in the land of the living and enjoying each and every minute of it. The Fates have been very good to me. Things are coming my way in great shape. Am still on the job and teaching every day. Don't feel a day older than I did forty years ago. Will be at our class reunion and hope to see many of our classmates."

Dr. W. J. NELLIS, 210 State Street, Albany, N. Y.: "In November, 1918, I contracted influenza. This has left me with roaring in my head with more or less deafness. I have been in the house most of the time since. The doctors tell me that with warm and dry weather I may hope to improve.

"I do not expect to come to the meeting, so if you have a chance come in and see me."

Dr. DANIEL SICKLER, Ogden, Iowa, writes: "I retired from active practice some years ago and now am giving considerable attention to archaeology, especially that part which pertains to old stone age relics. I have the finest private collection in the state and one of the best in the west. My family consists of wife and one son, Jesse D. Sickler. My son was just completing a four years' course in the Iowa State College when the war was declared. He enlisted, obtained a commission, went to France and was injured by a shell in the Argonne. He is now home and has about recovered."

Dr. F. B. STREETER, Glens Falls, N. Y., writes: "Your letter was duly received and I am pleased to learn that you are still living. I am well and actively engaged in general practice. For this I am thankful.

"I will not inflict upon you a rehearsal of my failures or successes, which are of no importance, but I am under a cloud of domestic affliction,

having lost by death recently my wife, a daughter and a grand daughter. Trusting that Fate has dealt more kindly with you, I am very truly yours."

Dr. PETER L. SUITS, Tribes Hill, N. Y., writes: "I am practicing medicine at the same place where I began forty years ago. I am busy as ever and can endure my work as well as ever. I hope to meet you at the decennial, June 10th."

Dr. T. B. VAN ALSTYNE, 10 Virgil St., Binghamton, N. Y., writes: "After graduating at Albany in '79, I served one year as interne in Albany Hospital, at that time situated on the corner of Howard and Eagle streets. There were associated with me Drs. Hallenbeck, Huddleston and Voorhees, all of the Class of '79. In October, 1880, with you in company I went to New York and took a regular course of lectures, besides some extra work, at the College of Physicians and Surgeons, Medical Department of Columbia University, and received a diploma from that institution May 29, 1881." [The Historian might note here that Dr. Van Alstyne was one of ten "honor" men in that class and that he took the third Harsen Prize with him when he went home.]

"I settled in my old home, Richmondville, N. Y., remaining there about twelve years. I then located at Binghamton, N. Y., where I have since been quite actively at work. During these years I have been a general practitioner but especially interested in diseases of children. I have had a few sick spells, but on the whole have been very much blessed with good health. For the past three or four years I have worked hard and feel that I have been doing something for humanity and democracy during these days of war."

Dr. ALFRED W. WILMARTH, Chippewa Falls, Wis., writes: "I am still in the work I have followed here for twenty-two years. The institution has been developed to its ultimate capacity. A new institution has been organized in the more densely populated section near Milwaukee."

"Our only son did not decide to take up his father's work. He enlisted in the 32nd Division and is still in France. He was not daunted while floating in the Irish Sea after jumping from the sinking Tuscania. After sleeping in the road under a truck to keep off the rain he wrote, 'This is the life,' from the battlefield near Chateau Thierry. He is homesick now and wants to come home. I envy the boys their opportunity. I would love to be at the reunion this year. I hope it will be in every way pleasant and successful."

Dr. ALLEN FITCH failed to reply to my letter.

Dr. WILLIAM BASSETT FISH, Class Essayist, appears to be lost somewhere in the great city of Chicago.

Dr. CHARLES G. FISHER, in 1909, was at Roulette, Potter Co., Penn. That address does not reach him now.

Dr. A. L. MACMILLAN, Hanover, Mass., writes: "It is hard to realize that forty years have passed since we received our M. D. at the Albany

Medical College. I am happy to say I am alive and in good health. The past year has been a very busy one. So many of the younger men have been in the service, we older ones have had more to do, and your humble servant has had to hustle as he never hustled before.

"I will be seventy my next birthday, but I never felt better or more like work than I do now. I do not mean to rust out or die of dry rot. I hope to die in the harness and sometime meet the members of old '79. I want to assure you that my interest has not been lost in the class of long ago. Life has brought many pleasant things to me, but no memories are more cherished or more precious than those of the old friends and fellow workers of our young lives."

The following are the names of those the class has lost by death since 1909:

Dr. EDWARD EVERETT BROWN, October 6, 1910.

Dr. GILBERT JOHN DICKSON, January 9, 1912.

Dr. ADAM WALRATH, August 7, 1912.

Dr. CHARLES FRANKLIN HUDDLESTON, November 11, 1912.

Dr. GEORGE WASHINGTON GREGORY, February 26, 1915.

Dr. CLINTON DE WITT VAN DYKE, August 10, 1916.

Dr. JOHN LAWRENCE SCHOOLCRAFT, October 23, 1917.

Dr. EDMUND FROST FISH, January 21, 1918.

Dr. FRANK EDGAR SIMONS, October 1, 1918.

Some impressions of Class Day may be in order. I had a good time. After the morning session given up to Alumni routine and an address by Dean Ordway, we were taken to the Colonie Club for lunch. We were honored with the presence of a delegation of the College trustees. Their president, the Honorable Simon W. Rosendale, made a short address relating to the various needs of the college for increased endowment and expressed regret that a sinking fund had not been established many years ago to meet the emergency the trustees now found themselves confronted with. I received the impression that some of us young men back in '79 who appeared in badly fitting trousers and unbecoming hats were in a measure responsible for the faculty not beginning that endowment fund.

It is affirmed that doctors as an average at the present time do one-fourth to one-third of their work not only without pay but at a positive money loss. My experience makes me think it is true and I think back in '79 I got my share of the third. It did not occur to me a relative of Simon Peter would tell of it forty years later. During the lunch a very attractively printed Announcement of the Medical Department was placed at each plate and after it was over the Dean busied himself in picking up a goodly number of them. They were well worth taking home.

A great many, I regret to write, did not accept the cordial and urgent invitation to visit the Albany Hospital. Every effort was made to interest, instruct and entertain. I had as good a time as a small boy at a moving

picture show, and that is some time. A visit to Albany Hospital will help to keep the average alumnus respectable and it does take some effort to keep medically respectable; anyway I find it so. There appears to be an impression among the trustees that as physicians we lack business sense, and therefore are deficient in financial respectability. I believe as a bunch we would admit that they are right and that they should take some measures to remedy the defect, that is, if they have any influence with the faculty.

I would suggest that they select one of their number to deliver each year a course of five lectures relating to business for physicians.

Most respectfully submitted,

SHELDON VOORHEES,
Historian.

CLASS OF 1889

The Class of '89 was the fiftieth class to be graduated from the Albany Medical College. Our class numbered forty-one members, of which, so far as known, twelve have died since graduation. Of this number five have died since our last reunion, namely:

CHARLES GILCHRIST BRIGGS, February, 1919.

ANDREW H. BAYARD, August, 1911.

ALPHONZO C. DORVAL, December, 1917.

WILBUR F. LAMONT, August, 1912.

CHARLES W. NICHOLS, April, 1912.

Letters to HENRY W. BROWN and CLIVE C. McCULLOUGH were returned as unclaimed.

CHARLES GILCHRIST BRIGGS located in Schenectady shortly after graduation, where he remained in general practice until 1915 when he enlisted in the Red Cross. After serving in that branch for a time he enlisted in the French army and was given a captain's commission in the Medical Corps, where he served about three years. He was cited for bravery and given the "Croix de Guerre" for his valuable services. When the United States entered the war he was transferred to the Medical Corps of our army and was again appointed a captain. On account of poor health he returned to New York City in December, 1918 and spent some time in a military hospital. He gave the last four years of his life, although he was financially able to have rested, to make the world better and died in Schenectady in February, 1919.

ANDREW H. BAYARD who faithfully served us as historian for over 20 years died in Poughkeepsie, August 31, 1911.

Only nine of our class responded to my letter of inquiry.

A. E. BONESTEEL after graduation took a post graduate course in New York City and then located in Troy, where he practiced until 1901, when he moved to Indian Lake and still resides there. He has served several terms as Coroner, is now Health Officer and is also Postmaster of the

village of Sabeal, N. Y. Was married in 1891. Has four children and two grandchildren.

F. C. GORHAM was orator of our class when we graduated and judging from his interesting letter, he is probably still so inclined. Shortly after graduation he located in the city of Hudson and is still a resident there and in general practice. Was married in 1895. Is very active in fraternal matters, says that he has enjoyed his life work and the play that he has mixed in with it.

A. T. POWELL is still located in Coeymans, where he settled shortly after graduation. Is married and has a daughter 20 and a son 16.

J. MONTGOMERY MOSHER, born in Albany 1864, graduated from Union College, A. B. 1886 and A. M. 1889. After graduation he was appointed physician to the New York State Hospitals for the Insane and served until 1895. He was a student in Vienna, Berlin and London during 1895-1896. In 1896 he located in Albany and is attending specialist in mental diseases at Albany hospital and clinical professor of mental diseases at Albany Medical College. Is editor of the ALBANY MEDICAL ANNALS and associate editor of the American Journal of Insanity. Is a member of the medical societies of the County of Albany and the State of New York, American Medico-Psychological Association, American Neurological Association, Honorary Member of the American Hospital Association, Psi Upsilon Fraternity. Trustee of the Albany Orphan Asylum, Albany Academy, Young Men's Association and Alumni Trustee of Union College.

F. S. SNOW located in Valatie shortly after graduation where he remained for about twenty years. He is now located in Palatine Bridge, N. Y.

W. R. SEEGER started his career in the practice of medicine with his father at Milford, N. Y., where he remained for 1½ years when he located in Binghamton. Two and one-half years later on account of the illness and death of his father he returned to Milford, where he has since resided. He was married in 1890 and has one son who has served his country during the "World War."

J. R. STRANG after graduation located in Visscher's Ferry, practicing his chosen profession for over twenty years. A short time ago wishing to make life easier he built a home on the Troy-Schenectady road at Stop 17 and is doing a general practice. Is Health Officer of the Town of Niskayuna. Is married and has two children.

A. D. ROSE is still in Providence, R. I., where he located after graduation.

MERLIN J. ZEH is successfully practicing his profession at Watervliet, N. Y., where he located shortly after graduation.

WM. VAN DOREN after graduation located at Delanson, N. Y., where he remained for about two years. He then located in Mechanicville and

can still be found there. In 1891 he married Elizabeth Becker of Gallupville. He is Health Officer of the city of Mechanicville. Was medical examiner of Exemption Board No. 2, Saratoga County. Is a member of the Board of Education.

The following although not heard from are located as follows:

B. S. BOOTH, Troy, N. Y.

C. S. BUMSTEAD, New York City.

A. M. BURT, Ballston Lake, N. Y.

C. H. CALLENDER, Poquonock, Conn.

W. M. CAMPBELL, Cohoes, N. Y.

R. F. DUNCAN, Providence, R. I.

G. E. LOCHNER, Albany, N. Y. ('88, on account of age received his diploma with '89.)

EMMETT NIVER, Hillsdale, N. Y.

M. R. SMITH, McGraw, N. Y.

F. S. DEYOE, Hunter, N. Y.

L. J. SOMERS, Rochester, N. Y.

T. C. WASHBURN, Spencer, N. Y.

WALTER G. MURPHY, Hartford Conn. (on account of age received his diploma with '90.) Specialist in diseases of children.

WM. VAN DOREN, *Historian*.

HISTORY OF THE CLASS OF 1909.

HARRY H. DRAKE, Albany, N. Y., writes: "Since receiving my diploma from the Albany Medical College I have practiced medicine in Albany with the exception of seven months' service as interne in the Albany Hospital and six months' practice in the town of New Paltz, N. Y."

EDDY S. HASWELL, writes: "June 10, 1919. Since my esteemed classmate Charles Kelley wrote me asking for the story of past life, I have much against my better judgment briefly complied with his request.

"May 18, 1909. Commencement. One diploma, Degree, M. D., but could not practice.

"May 21, 1909. Completed state boards and received license to practice, but could not until,

"June 26, 1909, when I registered at the county clerk's office of Albany County, N. Y. So much for red tape.

"July 1, 1909. Began service as interne at St. Peters Hospital.

"July 1, 1910. Opened an office at 347 Hudson Ave., Albany, N. Y.

"October 19, 1910. Very serious accident. Became victim in the snare of Dan Cupid and was married to Ida Pulman.

"April 11, 1914. Moved to 496 Madison Ave., Albany, N. Y.

"School year of 1914-15. Quiz Master in Therapeutics at Albany Medical College. Owing to faculty changes, was not reappointed thereafter.

"School year of 1917-18. Was Director of Microscopy Laboratory at the Albany College of Pharmacy. Here also owing to changes in the faculty, was not reappointed.

"1914. Became assistant attending physician at the Homeopathic Hospital and attending physician at the Homeopathic Hospital Dispensary.

"1917. Became member of the staff at the Homeopathic Hospital.

"Present positions are: Attending physician and neurologist at the Homeopathic Hospital; attending physician at Home of the Friendless; attending physician at the Shelter of The Mohawk and Hudson River Humane Society; lecturer in Materia Medica at the Homeopathic Hospital Nurses Training School and at The Eastern New York Training School for Certified Nurses.

"My present condition is as above stated plus one residence; one automobile; one wife; one daughter, Ida Pulman, age 8; one son, Edward Stearns, age 5; all of the foregoing are assets. Liabilities none."

J. R. HUNTER, U. S. Army Gen. Hospital 31, Carlisle, Pa., writes: "Your letter of May 15th received and I would say that I will make every endeavor to be present at the class reunion. Since graduation I have been resident physician at the institutions of New York City: Dept. of Correction, laboratory worker, N. Y. Health Dept; general practitioner, New York City; captain, Medical Corps, U. S. Army, service at M. O. T. C. and U. S. Army General Hospitals Nos. 14, 31, and Walter Reed Gen. Hospital. At present on duty, Hospital No. 31. There is considerable accumulated leave coming to me and I should be able to be present at Albany June 10th."

HARLEY HEATH, Comstock, N. Y., writes: "After graduation I spent a year as interne in the Albany Hospital and on leaving there took up general practice in Hudson Falls. After one year in general practice I successfully passed a New York State civil service examination and received an appointment as head physician at Great Meadow Prison. This is a new and modern institution, situated near Hudson Falls. Here, unaided, I have looked after the medical department for eight years, organized and equipped the first hospital.

"Have a happy family, wife and two daughters. Am a member of several fraternal organizations and medical societies. Am vice-president of the Washington County Medical Society. If nothing intervenes, I can assure you it will be a great pleasure to meet the Class of '09 on June 10th."

ELLIS KELLERT writes from Officers' Club, Embarkation Hospital, Camp Stuart, Va.: "It is very unlikely that I will be out of the service in time to attend the class reunion. Should I not be present please remember me to the boys."

ARTHUR E. PITTS, 871 Madison Ave., Albany, N. Y., writes: "My

professional life since graduating has been quite successful and gratifying. Became interne at Albany Hospital and served one year.

"July 1st, 1910, became surgical assistant to Dr. A. H. Traver and am still serving as same.

"Married September 17th, 1910, to Caroline L. Becker of East Scho-dack, N. Y. Have two children, both girls: Evelyn F., age 7, and Betty Jane, age 3 years.

"Have enjoyed a good medical practice in Albany, and am at present located at 871 Madison Ave. January 1st, 1918, became coroner's physi-cian for Albany county; was reappointed January 1st, 1919. Expect to be present on Alumni Day."

W. R. RATHBUN, E. Springfield, N. Y., writes: "I am planning to meet with the 'boys' of 1909 at Albany on June 10th. Many times I have leaned back in my chair to take a look at the 'Class' picture hang-ing above my desk, and wondered where they are, how they are doing, etc. As to myself, I began practice in June of 1909 at Hartwick, N. Y., where I remained one year and five months. In October of 1909, was married to Lena M. Winne of East Springfield. In November, 1910, we moved to East Springfield, where we have remained. We have three children—one girl, two boys."

C. L. RUSSELL, State Hospital, Utica, N. Y., writes: "I have your letter of the 15th inst. relative to the anniversary of the Class of 1909.

"It is my intention to be present on that occasion unless something unforeseen occurs to prevent. Due to depletion of the hospital staff be-cause of war conditions, it is quite difficult to get away, especially so as our staff is very short and one of the members is leaving on the 1st of June; however, if it is possible, which I hope it will be, I shall be in Albany on the 10th of June.

"Following graduation, I immediately entered the hospital service at Binghamton, N. Y., and the greater portion of my work was devoted to clinical psychiatry, and at present I am in charge of the Pathological Laboratory at the Utica State Hospital."

F. E. VAUGHAN, Mt. Kisco, N. Y., writes: "Following graduation I became a member of the staff of the Hudson River State Hospital at Poughkeepsie, N. Y. I remained there for two years and then started private practice at Broadalbin, N. Y. While there I married Anna L. Granger of Mt. Vernon, N. Y. I enjoyed a good practice there but wanted to get away from the extremely rigorous winters, and to get nearer to New York City, so moved to Mt. Kisco, N. Y., a village thirty-six miles from Grand Central. I have now been here nearly five years, and am enjoying a fine general practice with quite some surgery mixed in. I think I have been moderately successful. I own my own home, have two fine daughters, and Buick automobile. Hope I will be able to come."

Mrs. C. B. WITTER, 6 Craigie Circle, Cambridge, Mass., writes: "Your letter of May 15th to my husband, Dr. Witter, was forwarded to me from Schenectady. Dr. Witter is still in service in France, and does not expect to return to the states until the latter part of July.

"It may be of interest to you to know that he is chief consultant in roentgenology in the Paris School for American Physicians. He has been in service since May 19, 1917, and taught military roentgenology in Cornell College, New York City, until he was ordered over seas in July, 1918. He was in charge of all X-ray work in Evacuation Hospital No. 20, until the signing of the armistice, and was then ordered into Germany in charge of the X-ray department in the 117th Sanitary Train of the Rainbow Division. When the division received sailing orders, Captain Witter was then ordered to Paris in the position he now occupies. I am sure he will regret not being able to join his class on June 10th.

"Very truly yours,

"(Mrs. C. B.) EDNA R. WITTER."

The Secretary presented the following note from S. F. Hance, M. D., Fairport, N. Y., enclosing a newspaper account of the thirty-third reunion of the 89th regiment of Civil War Veterans, held in September, 1918, incorporating a note from Dr. Hance, an alumnus, which, on motion of Dr. Vorhees, was incorporated in the Minutes of the meeting, and due acknowledgment directed by the Secretary.

June 7, 1919.

Association of the Alumni, Albany Medical College:

I extend to you my hearty greetings.

S. F. HANCE,

Class of '54.

A letter from S. F. HANCE, M. D., of Fairport, N. Y., who is ninety-two years old and was the first surgeon of the regiment, was read:

"Dear valiant comrades of the grand 89th: I extend to you my hearty greetings. It would give me joy could I meet with you at the reunion as you rally once again around the old flag. As I glance over the record of the battles you were in many of them are historic deeds and dark tragedies, the scenes of which will ever remain fresh in your memories. These thoughts bring to mind the words of Mark Antony in his immortal oration over his dead friend Caesar. 'The evil which men do lives after them, the good is often buried with their bones.' I think that sentiment is reversed in regard to the deeds of the Union soldier, for the memory of those deeds will not perish but live on and grow brighter through the cycle of coming ages until nations crumble and the knell of time. So

also with our brave boys and the allies in this world war for peace and righteousness. The bugle will never sound retreat or return to them until the legions of the outlawed and barbarous German empire with their thirst for blood and plunder are vanquished and their pagan kaiser can no longer disturb the peace and order of the world.

"I often try to cheer the mothers who have sons in the army by repeating the words of the Roman matron as she pointed to her warrior sons: 'These are my jewels. I would rather be called the mother of the Gracchi than the daughter of Scipio.'

"As I will not be present at your banquet, I will offer a sentiment. May your sons and daughters and their kinsmen and the youths and maidens throughout the land prize the heritage of the best monument the world has ever known and be as ready to defend and protect it as their fathers were in the 60's and as their sons and brothers are today to save the world from the tragedies of despotism.

"S. F. HANCE, *Surgeon.*"

The President, on behalf of Dr. Luther Emerick, President, announced a meeting of the Executive Committee of the Third District Branch of the Medical Society of the State of New York, to be held in the College office at half after eleven o'clock.

There appearing no other business the Association proceeded for luncheon to the Colonie Country Club.

THE ALUMNI LUNCHEON

The alumni luncheon was held at the Colonie Country Club during the recess after the morning session of the Association, the guests being transported from the College building in automobiles, generously provided by Albany friends of the Association under the direction of Dr. Eugene H. Hinman who officiated as grand marshal for the day. A substantial luncheon was served in the Club dining-hall, with attendance of one hundred. The trustees were represented by Hon. Simon Rosendale, President of the Board and Hon. Amasa J. Parker.

President Lamb of the Association called upon President Rosendale who gave some account of the stewardship and difficulties of the Board of Trustees, speaking felicitously and with humor upon the developments of medical education, and the increased responsibilities of the Board in recent years. He described the early activities of Dr. Alden March in establishing the

College and his enterprise in promoting the laboratory method of teaching anatomy by levying for material upon neighboring states. He was able to give a more encouraging report of the finances of the College which had survived the threatening crisis of war conditions with daily increasing prospects of prosperity.

At the conclusion of President Rosendale's remarks, Dr. Hinman, of the Nominating Committee, reported the following selection of officers for the ensuing year:

FOR PRESIDENT

THOMAS W. SALMON ('99), Staten Island, New York.

FOR VICE-PRESIDENTS

WALTER H. CONLEY ('91), New York City.

RALPH POST ('11), Ravena, N. Y.

FRANK S. SNOW ('89), Palatine Bridge, N. Y.

PAUL V. WINSLOW ('08), New York City.

WARDNER D. AYER ('10), Syracuse, N. Y.

FOR EXECUTIVE COMMITTEE (term expires 1922)

WILLIAM C. TREDER ('07), Schenectady, N. Y.

WILLIAM D. COLLINS ('07), Hudson, N. Y.

ARTHUR SAUTTER ('92), Albany, N. Y.

C. L. MYERS ('95), Albany, N. Y.

On motion the report of the Nominating Committee was accepted and adopted, and the Secretary was directed to cast one ballot for the officers named. This was done and the chair announced the election.

The Association then adjourned for a visit of inspection of the Albany Hospital where the members were entertained in the various departments by the heads of clinics.

ANNUAL ALUMNI DINNER

The annual dinner of the Association was held at the Hotel Ten Eyck on Tuesday evening, June 10th. Dr. Lamb, President of the Association, presided at the speakers' table which was occupied by Dr. Frederick W. Shattuck, of Harvard, the guest of the evening, Chancellor Richmond, the Reverend Roelif H.

Brooks, Mr. Robert Olcott and Mr. Luther H. Tucker of the Board of Trustees, and Professor Elting. The address of Dr. Shattuck was particularly timely, in the informal presentation of the call upon the medical school for the development of a department of Industrial Hygiene. He touched not only upon the need of attention to instruction in this important economic problem, but suggested ways and means.

Professor Elting gave a word picture of armistice day in Brussels, describing the pageant of that occasion, of which he was an eye witness, and President Richmond closed the evening with a promise of a great future for the School and of closer association with other departments of the University.

COMMENCEMENT EXERCISES

The eighty-eighth commencement exercises of the Albany Medical College were combined with the one hundred and twenty-third commencement of Union College and were held at the First Presbyterian Church, Schenectady, N. Y., on Monday, June 9, 1919, at ten o'clock.

The graduating exercises were opened by singing the 117th Psalm, followed by a prayer. The Albany Medical College trustees, faculty and students formed part of the procession. The Honorary Chancellor's Address was delivered by Major-General Leonard Wood, U. S. A., who spoke of the activities of the war, and the call for readjustment of men and events to the affairs of peace.

The degrees were conferred by the Rev. Dr. Charles A. Richmond, Chancellor of the University. The following named candidates for the degree of Doctor of Medicine were presented by Dean Ordway, representing the Faculty.

Romeyn Treadwell Allen, Ph.B.....	Schenectady
Jacob Epstein	Poughkeepsie
Carl Charles Giannotti.....	New Haven, Conn.
Joseph O'Connor Kiernan.....	Albany
George Nelson Leonard.....	Albany
Alfred Lawrence Madden, A.B.....	Troy
Alexander Mason	Gloversville
William Francis McDermott.....	Waterford
Webster Merchant Moriarta.....	Saratoga Springs

John Joseph Phelan, A.B.....Albany
 Alexander William Pietraszewski.....Schenectady
 Edson Hun Steele.....Mongaup Valley

The commencement procession, a time-honored and impressive ceremonial, formed at half after nine o'clock. The Trustees and candidates for honorary degrees met at the President's House, the Faculty at Silliman Hall, the Undergraduates and Alumni, the younger classes preceding, and the graduating class at the College Chapel. The line of march was past Silliman Hall and the President's House to the church, where seats were reserved for those taking part in the procession.

Mr. Luther H. Tucker, Secretary of the Board of Trustees, announced the award of prizes:

The Vander Poel Prize, endowed by Mrs. Gertrude W. Vander oPel, in memory of her husband, the late S. Oakley Vander Poel, for many years a professor in the College, consisting of a clinical microscope and accessories, offered to the senior student passing the best bedside examination in general medicine, was awarded to Dr. Wm. A. Pietraszewski.

The prize, consisting of an ophthalmoscope, offered by Dr. Merrill for the highest standing during the year in ophthalmology and otology, was awarded to Mr. Fred B. Mac Naughton.

The Townsend Physiology Prize, endowed by the late Professor Franklin Townsend, Jr., M. D., was awarded to Mr. John C. Younie, for passing the best examination in physiology at the end of the first year of study.

Dr. Boyd's Prize to the senior student having the highest standing during the year in obstetrics was awarded to Dr. Jacob Epstein.

The Daggett Prize, consisting of sixty dollars, for the best "anatomical specimens," was awarded to Mr. William M. Mallia, and the second Daggett Prize, amounting to thirty dollars, was awarded to Mr. Charles E. Allen.

The Daggett first prize for the best "deportment irrespective of scholarship," consisting of sixty dollars, was awarded to Dr. Joseph O. Kiernan, and the second prize, consisting of thirty dollars, was awarded to Dr. Carl C. Giannotti.

The Bigelow Prize, endowed by the late Professor John M. Bigelow, M. D., consisting of eighty dollars, offered to the senior student passing the best examination in diseases of the nose and throat, was awarded to Dr. Alfred L. Madden.

The exercises concluded with the "Ode to Old Union" and the benediction pronounced by the Chancellor.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF JUNE, 1919.

Consumption	23	Bright's Disease	14
Typhoid Fever	0	Apoplexy	8
Scarlet Fever	0	Cancer	11
Whooping Cough	0	Accidents and Violence.....	9
Measles	0	Deaths under 1 year.....	22
Diarrheal Diseases	3	Deaths over 70 years.....	32
Pneumonia	2	Death rate	15.55
Broncho Pneumonia	6	Death rate less non-residents	13.23

Deaths in Institutions.

	Non-res.	Res.		Non-res.	Res.
Albany Hospital	9	7	Hospital for Incurables.	0	1
Albany Hospital Camp .	1	6	Public Places	2	3
Albany County Hospital.	3	2		—	—
Homeopathic Hospital ..	1	7		23	41
St. Peter's Hospital	4	9			
Home for the Aged....	0	1	Births		159
Maternity Hospital	0	3	Still Births		7
St. Margaret's House ..	3	2			

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	3	Whooping-cough	6
Scarlet Fever	21	Tuberculosis	32
Diphtheria and Croup.....	5	Mumps	13
Chickenpox	16	Pneumonia	9
Smallpox	0	Influenza	7
Measles	162	Septic Sore Throat.....	4
German Measles	0		—
		Total	278

Number of days quarantine for scarlet fever:

Longest..... 33 Shortest..... 30 Average.... 31 2/15

Number of days quarantine for diphtheria:

Longest..... 26 Shortest..... 10 Average.... 21

Fumigations:

Rooms..... 214 Buildings..... 131

Milk bottles disinfected 1,043

Communicable Diseases in Relation to Schools.

	Reported		
	D.	S.F.	M.
Public School No. 1.....	1
Public School No. 4.....	..	1	1
Public School No. 14.....	..	3	5
Public School No. 15.....	1
Public School No. 18.....	38
Public School No. 20.....	3
Public School No. 22.....	..	2	..
St. Joseph's Academy	1	..
Cathedral School	2
Lady of Angels School.....	..	1	..
St. Vincent De Paul's School.....	1

Miscellaneous.

Cards posted for communi-		Inspections and reinspections	131
cable disease	119	Vaccinations	9
Cards removed	119	Vaccination dressings	70
Notices served on schools...	195	Children examined for em-	
Notices served on stores and		ployment certificates	139
factories	11	Number of employment cer-	
Postal card returns sent to		tificates issued	122
doctors	119		
Postal card returns received			
from doctors	119		

Tuberculosis.

Living cases on record June 1, 1919.....		860
Cases reported:		
By card	24	
Dead cases by certificate.....	8	32
		<hr/>
		892
Dead cases previously reported	15	
Dead cases not previously reported	3	
Removed	2	
Died out of town	0	
Recovered	0	
Unaccounted for	0	25
		<hr/>
Living cases on record July 1, 1919.....		867
Total Tuberculosis death certificates.....		23

Non-resident deaths:

Albany Hospital Camp	4	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	0	
City at large	0	
St. Peters Hospital	1	5

Resident deaths	18
Visits to cases of tuberculosis	25
Miscellaneous visits	20

LABORATORY REPORT.

Diphtheria.

Initial Positive	20	Unsatisfactory	10
Initial Negative	203		
Release Positive	66	Total	378
Release Negative	79		

Sputum for Tuberculosis.

Positive	90	Unsatisfactory	1
Negative	120		
		Total	221

Widals.

Positive	6	Unsatisfactory	2
Negative	16		
		Total	24

Meningococcus.

Positive	0	Water Analyses	0
Negative	0	Pathological Examinations ..	0
		Gonorrhea Examinations ..	57
Total	0	Miscellaneous Examinations.	0
		Total Examinations	1,105
Wassermann tests	179		
Milk Analyses	246		

DIVISION OF SANITATION.

Inspections	103	Reinspections	92
Plumbing	24	Plumbing	18
Sanitary	79	Sanitary	74

HEARINGS.

Hearings	8	Cases heard	17
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Class of Cases.

Filthy yard	6	Stagnant water	4
Ashes	1	Sewage	1
Filthy premises	2	Pigs	1
Filthy courtyard	1	Drain	1

Disposition of Cases.

Reinspection	16	Abated	1
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DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Permits issued	55	Blue or red	17
Plumbing	49	Peppermint	4
Building	6	Water test	0
Plans submitted	11	Houses examined	51
Old buildings	2	Re-examined	84
New buildings	9	Valid	36
Houses tested	21	Without cause	15
Smoke	0	Violations	0

REPORT OF REMOVAL OF DEAD ANIMALS

Horses removed	12
Dogs removed	31
Cats removed	91

Total 134

DIVISION OF MARKETS AND MILK.

Public market inspections ..	18	Milk cans inspected	246
Market inspections	96	Milk cans condemned	0
Fish market inspections	7	Lactometer readings	69
Fish peddler inspections	0	Temperature readings	69
Slaughter house inspections.	3	Fat tests	0
Rendering establishment in-		Sediment tests	87
spections	1	Chemical tests	0
Pork packing house inspec-		Cows examined	1,393
tions	0	Cows quarantined	0
Hide house inspections	0	Cows removed	33
Milk depots inspected	15	Complaints investigated	0
Stores inspected	0	Milk houses inspected	87
Dairies inspected	87		

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—STATISTICS FOR JUNE, 1919.—Number of new cases, 230; classified as follows: Charity cases, 57; cases, moderate income, 50; metropolitan, 62; prenatal, no charge for calls, 34; dispensary social service, 42; tuberculosis, 19; cases carried from last month, 123; total number of cases under care during month, 353. New cases classified according to disease: Medical, 59; surgical, 16; obstetrical (a) prenatal, 34; (b) confinement, 37; (c) maternity, 2; number diagnosis, 2. Disposition: Removed to hospital, 14; died, 5; discharged cured, 68; discharged improved, 45; discharged unimproved, 2; discharged to other care, 19; to dispensary, 3; number of patients still under care, 136. Cases reported by: Physicians, 38; metropolitan agents, 37; patients, families or friends, 57; nurses, 8; home social service department, 0; other sources, 3; dispensary, 7.

Visits for Nurses (all departments).—Number of visits with treatment, 1,160; number of social service, 379; number of prenatals, 108; number of tuberculosis, 134; number of other visits, 238; total number of visits, 2,019.

Metropolitan Report.—Number of metropolitan calls, 421; checks received for last month's calls, \$227.40.

Dispensary Report.—Number of clinics held, 60; number of new patients, 47; number of old patients, 245; total number of patients treated during month, 292. Classification of clinics held: Prenatal, 2; surgical, 9; nose and throat, 5; eye and ear, 13; skin and genito-urinary, 5; medical, 6; tuberculosis, 7; venereal, included in skin; lung, 6; dental, 0; neurology, 3; stomach, 0; pediatrics, 4; gynecological, 7. Special tuberculosis department: Number of tuberculous patients sent to hospital, 6; number of tuberculous patients returned from hospital, 7; number of tuberculous patients died, 12.

Current Medical Literature

NEW YORK STATE MEDICAL LIBRARY

Edited by Frances K. Ray

RECENT ACCESSIONS

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Bruce, Olliver. Lectures on tuberculosis to nurses. 1913.

Codman, E. A. Study in hospital efficiency. 1917.

Dana, C. L. Textbook of nervous diseases. 8th ed. 1915.

Gt. Brit. National health insurance commission. Medical research com-

- mittee. 1st report of special investigation committee upon incidence of phthisis in relation to occupations: I. Boot and shoe industry. 1915.
- Harrison, L. W. Diagnosis and treatment of venereal diseases in general practice. 1919.
- Hewitt, J. H. Free thrombi and ball thrombi in the heart. 1913.
- International clinics. ser. 28, v. 2. 1919.
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ALBANY MEDICAL ANNALS

Original Communications

CONFERENCE ON GENERAL LAWS RELATING TO DUTIES AND POWERS OF HEALTH OFFICERS AND HEALTH BOARDS.

*Lecture delivered in the Post-Graduate Course in Infectious Diseases
and Public Health for Physicians and Health Officers at the Albany
Medical College, Wednesday, May 28, 1919.*

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During the discussion of the paper assigned to me I shall confine myself strictly to the subject as stated. This is headed "Conference on General Laws Relating to Duties and Powers of Health Officers and Health Boards." I shall therefore not attempt to go into any extended discussion of details as to procedure or other such matters, but will endeavor to review the fundamental principles, as expressed chiefly in the Public Health Law, which control the powers and duties of health officers. This eliminates any discussion of the State Sanitary Code or of local ordinances. Should I go beyond these limits, we would wander far afield and not be able in the space of time allowed adequately to cover the subject. Moreover, since all of the details as to procedure are based upon the fundamental principles it is much more important that these principles be thoroughly understood.

I shall endeavor to divide my subject into five different heads, as follows:

1. General powers and duties of health officers.
2. Powers and duties of health officers in case of an epidemic.

3. Powers and duties of health officers as to nuisances.
4. Powers and duties of health officers in reference to tuberculosis.
5. Powers and duties of health officers as to venereal disease.

1. *General powers and duties of health officers.*—Section 21-b of the Public Health Law contains an outline of the general powers and duties of health officers. It provides that (1) the health officer must make an annual sanitary survey of his district and maintain continuous sanitary supervision thereof; (2) where no medical examination is made by the Department of Education the officer must make a medical examination of every school child as soon as practical after the opening of each school year; (3) he must make periodically a sanitary inspection of all school buildings and places of public assemblage and report thereon to the persons responsible for the maintenance and management of the same; (4) he must take such steps as possible to educate the public as to the causes, nature and prevention of prevalent diseases and the preservation and improvement of health; (5) he must take such steps as may be necessary to secure prompt and full reports by physicians of communicable diseases and of births and deaths; (6) he must generally enforce within his jurisdiction the provisions of the Public Health Law and the Sanitary Code; and (7) he must attend the annual conference of sanitary officers called by the State Department of Health and all local conferences called by the Sanitary Supervisor of the territory which includes his district.

It will be observed that in the main all of these duties and powers are general in their terms, and it is obvious that in the nature of things this is necessary. It would be unwise in the law to attempt to lay out in advance the exact limits of the powers and duties of health officers. No Legislature is wise enough to be able to foretell the contingencies which may arise and therefore in the ultimate analysis the exact course of action which a health officer must take must be governed largely by his common sense and good judgment.

Section 25 of the Public Health Law deals specifically with the subject of infectious and communicable diseases, and gives coordinate jurisdiction to the local boards of health and health

officers to take all necessary measures to prevent the spread of such diseases. In the succeeding heading I shall discuss the effect of the courts ruling on the broad provisions of this section. For the present it is to be noted that the health officer in the presence of a communicable disease may, subject to the provisions of the Sanitary Code, prohibit and prevent all intercourse and communication with infected places or things and may provide, if necessary, for thorough purification and cleansing of such infected places or things before general intercourse is allowed. The health officer is also required to report immediately to the State Department of Health all cases of communicable disease arising within his district.

By section 21-c of the Law the health officer is empowered to employ such number of public health nurses as is necessary within the limits of his appropriation and by section 21 he is authorized to employ such other persons as are necessary to carry into effect the orders and regulations of the board of health, the provisions of the Public Health Law and of the Sanitary Code, and to fix their compensation within the limits of the appropriation made for his use by the local board of health.

Under section 33 it is forbidden that any room or apartment in a tenement or dwelling house used for eating and sleeping purposes shall be used in the manufacture, wholly or partly, of coats, vests, trousers, knee pants, overalls, cloaks, shirts, purses, feathers, artificial flowers or cigars, except by the members of the family living therein, unless a permit has been granted by the local board of health. The health officer has the right to inspect these places and to destroy any infectious or contagious articles found therein; also to take such other steps as may be necessary for the preservation of the public health. It is, of course, fundamental that the health officer has power to enter any place within his district for the purpose of inspection and for ascertaining whether or not the provisions of law in reference to public health are being complied with.

Under section 21-b the written reports of health officers, made in pursuance of their duties, are presumptive evidence of the facts stated in such report and the health officer is not responsible in any action for any statements in such report unless it is proved that he acted in bad faith. This provision, as we shall

see later on in this discussion, is of the utmost importance and it should be constantly kept in mind and used by all local health officers.

2. *Powers and duties of health officers in case of an epidemic.*—Section 25 of the Public Health Law, as has been stated, imposes upon health officers the duty of guarding against the introduction of infectious, contagious or communicable disease by the exercise of proper and vigilant medical inspection and control of all persons and things infected with or exposed to such diseases. It would seem that this wording is sufficiently broad to give either to the board of health or to the health officer practically unlimited authority within reason to take any steps necessary toward the end in view.

Since 1895, however, the powers of a health officer have been greatly restricted by reason of a decision of the Court of Appeals handed down in that year. That court, in the Matter of Smith, 146 New York, 68, held that under the provisions of the then section 14 of the Public Health Law (now substantially reenacted as section 25) a health officer had no power to quarantine or isolate a person whom he had reason to suspect had been exposed to a communicable disease, even in the event of an epidemic, unless such person had actually been exposed to or infected with such disease. The effect of this decision is clear. No health officer could quarantine or isolate any person for a communicable disease and feel entirely safe in so doing. If his diagnosis should turn out to be incorrect and the person was not infected with the disease, or if he should not have the very difficult and technical legal proof required to show that the person had been actually exposed to such disease, then he would lay himself open to an action for false imprisonment with the consequent damages.

While there is no definite evidence to show the result of this, it is only natural that this holding of the Court of Appeals has tended to make health officers too careful in the performance of their duties in the case of an epidemic and, it may be, has given opportunities for the spread of epidemics which would not have occurred had the health officers felt themselves freer.

The writer has always felt that if the Smith case were presented to the Court of Appeals at this time, instead of over

twenty years ago, a different conclusion would be reached and that this opinion is reasonably correct is evidenced by the recent case of *Crayton vs. Larabee*, 220 New York, 493, decided in 1917. In the *Crayton* case a local ordinance of the city of Syracuse directed the health officer to order isolation or absolute quarantine of any house or person deemed by the health officer to be necessary in the case of a communicable disease. Under the provisions of this ordinance the health officer of Syracuse quarantined the plaintiff. There was no proof in the case that the plaintiff had ever been infected with or exposed to a communicable disease. Nevertheless, the Court of Appeals upheld the action of the health officer. This decision of the Court of Appeals was based upon the ground that the ordinance of the city of Syracuse authorized the action of the health officer; that this ordinance in turn was authorized by the provisions of the Second Class Cities Law. A reading of the provisions of the Second Class Cities Law forces the conclusion that any local health ordinance adopted thereunder must in turn be based upon the provisions of the Public Health Law.

In the *Smith* case there was also a local ordinance to which the Court of Appeals gave no effect. In the *Crayton* case there was a local ordinance to which the Court of Appeals gave effect. The learned justice who wrote the opinion in the *Crayton* case states that the later case is not in disagreement with the *Smith* case. It is a little hard to see how this can be true. However, from a health officer's viewpoint the reconciliation of these two cases is of no importance. The fact remains that the latest decision of the Court of Appeals holds that where a local ordinance provides for isolation or quarantine in any case deemed necessary by the health officer, then so long as the health officer acts in good faith and has reasonable grounds for his action, his action will be sustained, notwithstanding the interpretation of section 25 of the Public Health Law handed down by the Court of Appeals in the *Smith* case.

This situation emphasizes the importance of having proper local ordinances giving the health officer sufficient power, and adds a further point to the desirability of the universal adoption of the model sanitary code recommended by the Public Health Council. If the health officer in the *Crayton* case had proceeded

under the provisions of the Public Health Law and not under the provisions of its local ordinance, he would have been liable to damages for false imprisonment, whereas having proceeded under the provisions of his local ordinance he was upheld and exonerated by the Court of Appeals.

3. *Powers and duties of health officers as to nuisances.*—In discussing the problems of a local health officer in relation to nuisances, it is well first to understand exactly what we are talking about. Various evils and conditions are covered by the general term “nuisance.” With some of these a local health officer, as such, has no concern. Such are some of the nuisances defined in section 1530 of the Penal Law, the nuisances covered by section 6 of the Public Health Law and the nuisances covered by sections 343-a et seq. of the Public Health Law. Some of the nuisances covered by each of these provisions of law unquestionably may come within the jurisdiction of health boards and officers. But everyone that does come under such jurisdiction is also covered by section 26 of the Public Health Law, and it is with the nuisances covered by this section that we are now concerned.

Section 26 is not as clear as might be desired in reference to what nuisances are covered by it. It provides that the local board of health “shall receive and examine into all complaints made by any inhabitant concerning nuisances or causes of danger or injury to life and health within the municipality.” Literally, this might be deemed to include all nuisances but it is a fundamental rule of statutory construction that words must be interpreted in the light of their context, and it will be noted that immediately following the word “nuisances” are the words “causes of danger or injury to life and health.” It is my opinion that the nuisances contemplated by this section are nuisances which affect life or health within the municipality, and these only. Otherwise, there would be included within the jurisdiction of public health officials many matters which have not even a remote connection with public health. Witness the provisions of paragraph 3 of section 1530 of the Penal Law which declares to be a public nuisance anything which “unlawfully interferes with, obstructs, or tends to obstruct, * * * a lake or a navigable river, bay,” etc. It is, therefore, assumed in this discus-

sion that the jurisdiction of health boards and officers in relation to nuisances are confined to those nuisances which affect the life or the health of human beings within the municipality.

It is possible that within a broad definition of such nuisances might be included *any* matter which might affect the life or health of the community. For example: a person infected with small-pox might very well be deemed to be a nuisance since unquestionably his condition affects the life and health of the community. I do not, however, consider that this was the intent of the law. The specific provisions in other parts of the Public Health Law in reference to control of persons who are afflicted with diseases would seem to indicate that the intent of the Legislature was not to include such persons within the definition of nuisances. Nor is it reasonable to assume that if a person has in his possession an article which through contamination or otherwise, may endanger his health, and his only, that the Legislature intended to include this within the definition of nuisances. The element of danger to the public, to some extent at least, must be present. It would therefore seem that the cause of the nuisance must be something other than a person affected with a communicable disease and that the danger flowing from such cause must threaten some considerable portion of the population. For the purposes of this discussion, I would, therefore, define a nuisance with which a health board or officer is concerned as "a condition of property which injures, or tends to injure, the life or the health of any considerable number of persons within a municipality."

When such a condition is found within a community, it becomes the duty of the health board to take cognizance thereof and to proceed to remedy it. The steps to be taken in general are laid down in sections 26, 31 and 32 of the Health Law and in chapter 6 of the Sanitary Code. There are two ways in which a proceeding against a nuisance may start. The first contemplates a proceeding originating in the board. Either a complaint concerning such nuisance is made to the health board by an inhabitant, or the board itself takes cognizance of an existing nuisance. Under the provisions of section 26 of the Health Law, in either case it thereupon becomes the duty of the local board to investigate the nuisance and it is given authority to

enter upon the premises upon which such nuisance exists and to inspect and examine the same. It may do this either through its own members or through agents or other persons designated for that purpose. The usual course of proceeding is for the board to act in this respect through its health officer. The board, after such examination, is bound to furnish the owner or occupant of the premises with a written statement of the results thereof and its conclusions. If it determines that a nuisance exists, it makes an order for the suppression and removal of the nuisance and it may include in such order a provision that on failure to abate such nuisance the person causing the same shall be liable for a penalty not to exceed \$100. (Section 21 of the Public Health Law.) It would seem to me also that it would be wiser in every such order to specify a definite time within which the nuisance must be abated or removed. Section 31 provides that after the service of such order upon the owner or occupant of the premises and the failure upon his part to abate the nuisance, the board, or its agents, may enter upon the premises and suppress the nuisance. For this purpose the board may spend any money which it has in its hands, but the expense of abating such nuisance is made a lien upon the premises upon which the nuisance exists and takes precedence over "all other liens and encumbrances whatever." (Section 32 of the Public Health Law.) To satisfy this lien, the premises may be sold in substantially the same manner as premises are sold for taxes.

This may serve as an outline of the procedure to be followed by boards of health when nuisances are found to exist within their jurisdiction. It should be noted, further, however, that whenever the State Commissioner of Health is satisfied that a nuisance exists, he may order the presiding officer of the board of health to convene the local board and to take such definite proceedings as the Commissioner of Health deems wise for the abatement of such nuisance, and it thereupon becomes the duty of the board to convene and to take the action recommended by the State Commissioner of Health. This duty, as well as all the other duties thus far outlined, may be enforced by mandamus at the instance of the State Commissioner of Health or of the local board of health, or any citizen of full age residing in the municipality. (Section 37 of the Public Health Law.)

The second method of proceeding against a nuisance originates with the health officer. In addition to the duties which may be imposed upon the health officer by his board of health in the suppression of nuisances, there are to be noted the provisions of chapter 6 of the Sanitary Code. By such provisions it becomes the duty of the health officer, as soon as he receives a complaint in relation to, or knows of the existence of, a nuisance, to make a thorough investigation of the same and to do all in his power to secure its abatement. Within five days of the receipt of the complaint, the health officer must file with the local board the complaint, if made in writing, or otherwise a summary thereof, or if no complaint has been made a statement of the facts, and also his report showing his findings, his opinion as to whether or not the conditions amount to a nuisance likely to affect health, the action taken by him and whether the nuisance has been abated. It is the duty of the board of health, upon the receipt of such report, to convene and to take such steps as may be necessary. These would naturally be the steps provided for in section 26 hereinbefore outlined. After the board has made its decision upon the report of the health officer, the health officer shall within forty-eight hours forward a copy of the decision, together with a copy of the papers filed by him with the board, to the State Commissioner of Health.

The proceeding originating with the health officer necessarily presupposes an investigation and a written report by the health officer and it would seem to be extremely important that, where proceedings originate with the board, the investigations should also be made by the local health officer, and that a written report should be made to the board by the local health officer before any action be taken by it. The reason for this is as follows:

While the board has jurisdiction to determine what is or is not a nuisance, this jurisdiction is reviewable by the courts. Unless the courts find that a nuisance existed as a matter of fact, the proceeding of the board will be overturned and if the board, or its agents, has acted upon such decision of the board, they will be liable for any damages resulting because of their wrongful decision. (*People ex rel. Copcutt vs. Yonkers*, 140 N. Y. 1.) This decision is only a sample decision taken from many others to like effect.

As stated heretofore, section 21-b of the Public Health Law provides that the written reports of health officers shall be presumptive evidence of the truth of the facts stated in such report. If, therefore, the local health board, before declaring a thing a nuisance, has in its files a written report of its health officer declaring the thing to be a nuisance, it then has presumptive evidence of the existence of a nuisance and the burden is thrown upon any one seeking to overthrow the action of the board to prove that a nuisance did not exist. This, of course, is of the utmost importance. It is further to be noted that under the provisions of section 21-b, even though the court shall find that no nuisance exists, the individual health officers or inspectors of the board are not liable for any acts done, but that the municipality must bear such liability. This is expressly provided for in said section 21-b, and almost certainly this will be upheld by the courts. (*Golden vs. Health Department*, 21 A. D. 420.) If the investigation be conducted by others than the health officer, it is not certain that this immunity would exist.

Care must be taken to distinguish between the acts of a health board in investigating a nuisance and its acts in declaring a nuisance. The former, i. e., the investigation, may be conducted, as heretofore outlined, by health officer or by other employees of the board. The act, however, of declaring a condition a nuisance must be the act of the board and its power in this respect cannot be delegated. (Reports of Attorney-General, 1913, vol. 2, page 482.)

From what has been said in outlining the steps to be taken by a local health board in abating a nuisance, it is clear that the board has the right to enter upon premises and forcibly abate a nuisance after the owner has refused to obey the board's order. It is, however, unwise to adopt this extreme remedy unless the fact that the nuisance exists is unquestionably clear. Otherwise, as has been stated, if the court should afterwards hold that there was not a nuisance the municipality would then be liable for any damages caused. Where there is any doubt it would be wiser to proceed in the courts to obtain the abatement of the nuisance. It is probable that the result desired may be obtained through an injunction proceeding. (*Cahill vs. Moran*, 91 Misc. 301.)

There are certain special cases of nuisance, such as those men-

tioned in section 39 and sections 27 to 30 inclusive of the Public Health Law, where health officers and health boards have jurisdiction, but these are so special in their nature and arise as a practical problem so infrequently that it is not deemed wise to enter into a discussion of them at this time.

4. *Powers and duties of health officers in reference to tuberculosis.*—In the first place, before any site for a hospital or camp for the treatment of tuberculosis is established, approval of the site must be granted by a board consisting of the State Commissioner of Health or his deputy and the local health officer. It is the local health officer's duty to sit as a member of such board and his powers and the powers of the State Commissioner of Health, sitting as such board, are equal. Under the provisions of section 320 of the Public Health Law it is the duty of every physician to report immediately any case of tuberculosis. It is the duty of each registrar to report to the health officer the name and address of every person reported to him as having died from tuberculosis. It thereupon becomes the duty of the health officer to ascertain whether or not the physician signing the death certificate had previously reported the case as one of tuberculosis. If he has not, the health officer must call his attention to the provisions of section 320 and in case of repeated violations by any physician the health officer must institute prosecution against him.

Under section 321 it is the duty of the health officer to make, or cause to be made, a microscopic examination of the sputum forwarded to him as that of any person having symptoms of tuberculosis and he must promptly report the result of such examination free of charge to the physician or person upon whose application the examination was made. He must also keep a register in which he shall record the results of such examinations, which register shall not be open to any person other than the health authorities of the state and of the municipality.

Under the provisions of section 323 the health officer must be notified within twenty-four hours when any person having tuberculosis removes from his dwelling or dies therein, and said dwelling shall not be occupied again until it has been thoroughly disinfected under the supervision of the health officer, as provided in section 324. Should the health officer, however, decide that mere

disinfection is not sufficient but that a thorough cleansing and renovation of the dwelling is required, he must notify the owner or agent of the premises to this effect and the cleansing and renovation must be done under the supervision of the health officer. If the disinfection or cleansing and renovating are not done by the owner as required by section 324, it must be done by the local health authorities and the charge for so doing is a lien upon the property. If within forty-eight hours after the giving of such orders and directions the premises have not been disinfected, cleaned or renovated, the health officer must post a sign stating that tuberculosis is a communicable disease; that the apartments have been occupied by a consumptive and that they must not be occupied again until the order of the health officer directing their disinfection has been complied with.

Where any person has tuberculosis and by the disposal of his saliva or otherwise is endangering the people immediately surrounding him, such people may notify the health officer. It then becomes the local health officer's duty to investigate the complaint and if it appears that it is well founded he must serve notice upon the person complained of requiring him to dispose of his sputum in such a manner as to remove all reasonable offense or danger. If such notice is not complied with, the person violating the same is guilty of a misdemeanor. If a complaint be made to a health officer that a person affected with tuberculosis, or other communicable disease, is unable or unwilling to conduct himself and to live in such a manner as not to subject the members of his family or household, or other persons, to the danger of infection, the health officer must immediately investigate the same and if he finds that such person is a menace to others he must lodge a complaint with a magistrate and on such complaint the person shall be brought before such magistrate. The magistrate may, if he believes the complaint is well founded, commit such person to a county hospital for tuberculosis, or to any other hospital or institution suitable, and such person shall not be discharged except in accordance with the rules and regulations of such institution. If the patient neglects or refuses to obey such rules he may be arraigned for disorderly conduct and taken before a magistrate on the complaint of the chief medical officer of the institution.

Where no physician is attendant upon a person having tuberculosis, the health officer must take all proper precautions and give proper instructions for the safety of the individuals occupying the same house or apartment, and perform all the duties of a physician in reference to tuberculosis.

Under the provisions of section 328 it is further the duty of the health officer, whenever a case of tuberculosis is reported to him, to transmit to the physician reporting the case a printed statement and report, in a form approved by the State Commissioner of Health, naming such procedure and precautions as in the opinion of the State Commissioner of Health are necessary or desirable to be taken on the premises of a tuberculosis patient. It becomes thereupon the duty of the physician either to carry into effect all such procedure and precautions and to report thereon to the local health officer, or, if the physician is unwilling or unable to carry into effect the procedure and precautions, to report to that effect. It thereupon becomes the duty of the health officer himself to carry out such precautions and procedure. For this service the health officer is entitled to the sum of one dollar. When the health officer receives a report that the physician is following the precautions and procedure outlined, he shall thereupon investigate and if he finds that such procedure and precautions are being complied with he shall certify to the financial authorities to this effect and the physician shall receive his fee of one dollar. Wherever a health officer deems it necessary he may require the compliance with additional precautions and procedure. He may also cause all reported cases of tuberculosis to be visited from time to time by a public health nurse.

Upon the recovery of a person having tuberculosis, the attending physician must make a report to this effect to the local health officer.

5. *Powers and duties of health officers as to venereal disease.*—All of the powers and duties of health officers in reference to other communicable diseases prevail also in reference to venereal diseases. By a recent act of the Legislature, however (chapter 264 of the Laws of 1918), certain additional powers and methods of procedure were enacted into law.

There is in the new act very little power given to health officers which they did not already have. By making the steps to be

taken definite, however, the Legislature has given emphasis to the powers which local health officers already had and in many cases they have transformed into duties what were before only powers.

The act in question may be said, in general, to apply to three classes of persons: (1) persons suspected by health officers of having a venereal disease and who are likely to be the source of infection to others; (2) persons convicted of various crimes specified in section 343-n of the act which may be generally classified under the head of prostitution; and (3) indigent persons affected with venereal diseases and desiring treatment.

The first two classes may be designated as those who come involuntarily under the provisions of the act; the third class those who come voluntarily under the provisions of the act.

As to those who come under the provisions of the act involuntarily, these provisions, as has been said, apply to two classes of persons: (1) those who are suspected of having venereal disease and who there is reason to suppose are likely to be the source of infection to others; (2) those who have been convicted of any of the offenses prohibited by the law in reference to prostitution. In the first class it is very important for a health officer to remember that jurisdiction to control a person is not conferred upon him merely by the fact of said persons having a venereal disease. There must, in addition, be present the fact that the person afflicted is likely to be a source of infection to others. When such a person is found in a health officer's jurisdiction, or when a person has been convicted of any of the designated crimes, it then becomes the duty of the health officer to cause such person to submit to an examination to determine whether or not venereal disease exists. Such examination may and should include the laboratory examination of blood or bodily discharges. If the result of such examination discloses the presence of venereal disease in either of the two classes of persons designated, then the health officer must see that the person submits to a course of treatment by a duly licensed physician approved by the local health officer or by the State Department of Health. The treatment by such physician must conform with the rules and regulations laid down by the local health board. Such regulations to be effective must first be approved by the

State Department of Health. Under the terms of the act they shall, in general, provide that a person shall submit to such course of treatment; for the manner and duration of isolation, etc. the State Department of Health has provided model rules and regulations which have been submitted to the various local health boards with recommendations for their adoption. It must be remembered, however, that even though a local board of health adopts the exact rules recommended by the State Department of Health they must after adoption be formally approved by the Department before they can be effective. The only effect of the model rules recommended by the Department is to save the local boards the labor of drafting rules which they have to submit to the Department and which probably will be revised and redrafted several times before they are satisfactory. If the board adopts the model rules they can be assured of approval by the Department.

No person suffering with venereal disease and once having submitted to treatment under the provisions of this act can be discharged from treatment until he or she has been cured of the disease.

In the case of a person convicted of any of the designated crimes, they are not to be released from the custody of the court of conviction until they have submitted to the examination herein outlined.

As to persons submitting voluntarily to the provisions of the act.—Whenever a person, whether within any of the two classes discussed or not, has a venereal disease and is unable to pay for treatment, he may apply to the local health board for treatment. The health board must immediately institute treatment and, if, on investigation, they find the person is unable to pay for treatment, they must continue the treatment at the expense of the local health district. This duty of the law is mandatory and not merely permissive and boards of health must provide the treatment therein provided for.

In addition to what has been said, the law also provides that no person, other than a licensed physician, shall treat or prescribe for venereal disease or dispense a drug, medicine or remedy for the treatment of such disease except on the prescription of a duly licensed physician. This applies not only to laymen

but also to all druggists in the state, so that from now on it is unlawful for a druggist to dispense a remedy for a venereal disease except upon the written prescription of a duly licensed physician. When such prescription has been filled, the person dispensing the drug must retain the prescription, give a copy to no one, and fill it only once.

It is further provided that all reports made to, and all information secured by, a board of health in enforcing the provisions of this act shall be strictly confidential except insofar as is necessary to carry out the purposes of the act. Exactly what is the meaning of this last phrase is not clear. It may be assumed, however, that the records of the board are open to inspection by local health officials and by the officials of the State Department of Health. I do not think that under any other circumstances should they be open to inspection by any one, except perhaps in court procedure. If at any time in any court proceeding disclosure of the information in this regard in the health officer's records is considered important, I should advise that no health officer make such disclosure except upon a subpoena duly issued and duly served; that even when he attends court in obedience to the subpoena, he refuse to answer when the question in reference to the records is first put to him and refuse to permit the inspection of the records, pleading the provisions of section 343-r of the Public Health Law. If, however, after such statement on the part of the health officer, the court orders him to make any disclosures, I should then consider that the health officer is released from the prohibition of said section and would be amply protected in making such disclosures.

In conclusion on this branch I might state that in my opinion no health officer need fear proceeding under the provisions of this new law so long as he acts with reasonable common sense and in good faith. It has been suggested that the law may be unconstitutional. That, of course, cannot be decided until a case has been brought before the court. The reasons for and against its constitutionality could be of no interest to this gathering. Suffice it to say that after a careful examination of all available law on the subject, it is my opinion, as well as the opinion of many other lawyers with whom I have consulted, that the constitutionality of this act will be upheld by the courts.

SMALLPOX AND VACCINATION.

Lecture delivered in the Post-Graduate Course in Infectious Diseases and Public Health for Physicians and Health Officers at the Albany Medical College, April 16th, 1919.

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Consultant in Dermatology, New York State Department of Health.

It seems like old times to come back here to the old lecture room. I am glad to see your familiar faces and I feel quite at home, especially with the dean of this course to introduce me. I am afraid I won't tell you anything fresh on this old theme, but it is fresh to me to say it again, because it is quite a little while since I have spoken on this subject. I want to show you some slides of smallpox and vaccination, but I would like to preface them with a few words on the diagnosis of smallpox, for I intend to confine what I have to say to you this afternoon about smallpox to this practical part of its discussion.

Everybody knows a well defined, well marked case of smallpox; nobody can miss the diagnosis. I think it would be quite impossible, even for one who was entirely uninitiated to mistake it. But in mild smallpox, which we are much more apt to see, the diagnosis is less easy. I think I have never been puzzled more over cases than I have in some that have been the product of Schenectady environment. Dr. Duryee has saved up more than one there which I had to jump the diagnosis on. There are cases which will puzzle, but I would remember this about it that smallpox is a very decent disease in that it always plays the game; you can always trust it to run its course in an orderly way and to express itself by certain well defined symptoms, which to some degree will be present in even very mildly expressed cases. And let me say in this connection that mildness of expression is diagnostic of smallpox so far as eruption is concerned. Ask yourselves if you have ever seen a case of chickenpox with so few as twenty or thirty lesions; but you may find smallpox cases with less than half a dozen and these ill defined.

Reverting, for analogy, to our country experience I would say that a diagnosis will like a milking stool generally stand on three legs. The gist or substance of what I have to say to you now is

contained in three cardinal points of diagnosis which are fairly pathognomonic and, to some degree, characteristically present in every case. I will give them in the order of their diagnostic value.

First: The mode of onset or initial fever. That of smallpox is peculiar to it, not found in any other disease. It begins like an ordinary cold. A man awakes in the morning feeling a little indisposed, but not out of sorts enough to stay away from his work. Very likely in the afternoon he will stay at home and toward night will have headache and rachialgia with general indisposition more marked. Next day the symptoms will be intensified and the more as the day goes on, very likely feeling worse during this time and till the next day than at any time of the whole course of his disease. Then sometime on the third day a rash will develop on his face and before night he will begin to feel decidedly better; there will be a rather abrupt abatement of his sensation of illness. Here are phenomena, I think you physicians all know, not found in any other ailment whatever: A gradual onset, increasing intensity, rather abrupt abatement as eruption appears. It is singular to smallpox.

Second: Will be the distribution of the eruption. This will always come first on the uncovered part of the skin, the face and hands; and it will always be more abundant there. Take note of this when you see the slides. Contrast the face with the chest, where even in a confluent smallpox there may be comparatively little eruption; and compare it with chickenpox where the converse is the case. At the same time note that on a given locality all the lesions will appear within twenty-four hours so that all adjacent lesions will be of the same age and size or stage of development; and all of the entire body will appear within forty-eight hours. Here again contrast this with chickenpox, where there are new lesions coming continuously alongside of old ones for five days, so that you find small new ones adjacent to those which came three or four days ago and are fully developed. There are likely to be lesions also on the back of the hands which will help in diagnosis from acne; also on the palms, and likewise on the roof of the mouth in cases of enough severity, but so may there be in chickenpox. The eruption will be grouped.

Third: The morphology of the lesion; this is the symptom usually first questioned for a diagnosis but should be the last. The type lesion of smallpox is a deep-seated papule. At its very earliest it will be a *red* macule, very soon developing the solid elevation which then and later your finger tip will make you sensible of more than your eyes and distinguish it from the congested base of a chickenpox lesion. You will find these about the central part of the face or the forehead. The red areola seen about the chickenpox lesion will not be present. On the face and limbs this type of papule will exist; it will not be so marked on the body. It will characterize the lesion in all cases; but in mild cases it may abort, develop no further. In ordinary cases serum will appear in the apex of the papules in a few days, eventually becoming pustular; but very often it stops short of this, the vesicle dries up, but the deep papule will continue for the term of the disease. The vesicle of smallpox is almost stony hard, unlike any other, being chambered.

Let us apply these three symptoms to a mild case. There is a sparse and indefinite lesion. Let the patient tell his own story. Often without prompting he will narrate a course of symptoms such as I have given; otherwise ask him when the eruption appeared and where; then as to his sensations that day, the day before and the day before that. It may be that it has been so mild that he has never given up his work, but you can get some approach to a three-day onset even if it is only a headache and mild malaise. Many have had no more than this, found in factories or on the highway at their work or in public conveyances, all to a modified degree infectious. Traces of the lesion can be found on them for a considerable time, remnants of the hard papule or stains left. One who has such a mode of onset, such a distribution of the lesions, and such a papular eruption has smallpox.

Now we will look at the lantern slides. First we will have a series of views of the eruption showing it from day to day in an unvaccinated man; beginning with the third day of eruption. The face is shown and is closely covered with papules which have broadened so as to involve most of the face. We will see the identical lesions as they develop. Fourth day: the papules

have enlarged and are becoming vesicular as were some in the last view; notice that while most of the skin is involved there is a grouping of lesions and areas that are free. Sixth day: all the lesions have become vesicular, of the size and shape of a split pea, tensely full and almost stony hard to touch. Eighth day: height of the eruption, the vesicles have become turbid pustules, some have run together, the face is swollen, the fever of suppuration is at its highest. Tenth day: not much change except that a few of the earliest lesions are drying; and this is quite marked as seen on the next-slide of the twelfth day. Sixteenth day; desiccation is well under way and the subject is going on toward convalescence; and the final picture is after recovery showing scars and the baldness from involvement of the scalp. Vaccination would have saved all this.

This slide showing a young girl at the eighth day of eruption is a good illustration of several points in diagnosis; the eruption is abundant on the face and hands and sparse on the chest; grouping of lesions is characteristic; lesions are of one size except that some have run together.

In this next slide we see the distribution of eruption on the entire nude body; on the face abundant, on the limbs considerable, on the chest very little.

This negro subject of severe smallpox at the eighth day has confluent eruption on the face, semiconfluent on the limbs and discrete eruption on the trunk.

In all these cases there were lesions on the roof of the mouth and on the palms and soles as well as on the scalp; the same will however occur in the case of chickenpox and is not diagnostic.

This is a case of discrete smallpox showing scattered lesions on the face in the healing stage with large crusts covering them, a mild case. There are probably few lesions elsewhere. These thick, dry crusts are unusual.

Here is an illustration of exceedingly mild smallpox: on this young woman's face there are not more than half a dozen lesions with one here and there on the arms, and they are evidently not going beyond the papular stage. Still though vesicle may not form and the lesion abort as it were they will continue for a

considerable time as firm papules so that they may be detected for two weeks. Many of these mild cases occur; apply to them the three guides to diagnosis, they will be found in some degree. I once saw an undertaker who gave a history of onset as already outlined who had so far as I could discover only a single papule on the face; two weeks before he had buried a body dead from smallpox. These very mild cases must be only moderately infectious, for not a tithe of those whom they come in contact with contract smallpox, which ordinarily is as infectious as measles.

Chickenpox, fourth day of eruption: the lesions here are superficial vesicles; of various size from finger-nail to pin-head and these side by side; covering thickly the chest with little on the face; the largest came four days ago along with a little fever, the smallest came today; the oldest are already desiccating. Tomorrow new ones will appear but will mostly not develop, and all will in a few days dry, the thin crust fall, leaving only a stain, not the tangible papule that lingers on in the mild smallpox.

Chickenpox in an adult: Not infrequent up to the age of thirty; usually they will have some initial fever and more illness during the course. The eruption is more abundant on the upper back than elsewhere. If in any case there are only half a dozen lesions the case is smallpox rather than varicella, in which there would never be less than thirty lesions — there may be thousands covering thickly the entire body yet the subject moderately ill; with a body so covered with smallpox he would be moribund.

A child with measles: the body covered with dull red macules; the coryza which characterized the four-days fever of onset still apparent; Koplik spots still probably in the mouth. There is no resemblance to the papules of smallpox but often they are confounded.

Occasionally smallpox is confused with impetigo, acne, scabies, multiform erythema; but it may more likely be with the papulopustular syphilide and with difficulty distinguished when a satisfactory history cannot be gathered, for the lesions and their distribution can be identical.

Here is the picture of Edward Jenner. On May 14, 1796 after he had for 25 years followed up the remark of a dairy maid,

"I will not take the smallpox for I have had the cowpox," he innoculated a lad with lymph from a sore on a dairy maid's hand which she had contracted from lesions on the udder of a cow having cowpox, and then established that he was fully immune to smallpox. This meant the potential saving of 600,000 lives a year; surely he was one of the great benefactors of humanity.

Here is a slide showing three children: they were brought to the hospital with their mother who had smallpox as did also the youngest child; the two older of kindergarten age had been vaccinated and escaped, and although in the hospital for weeks did not take the disease. School vaccination has certainly saved many and should be required by law.

Here are two sisters who have been exposed to smallpox: one vaccinated in infancy has now at the age of 14 a slight varioloid while the other never vaccinated has severe smallpox. I recently saw a newspaper account of a family in Chicago who had been exposed to smallpox and the only one vaccinated was a man eighty years old who had been vaccinated in infancy who alone escaped. No one can say how long immunity continues after vaccination. But I think that a very considerable number, I have sometimes thought 50 per cent, are protected for life by one vaccination. Does anyone doubt the efficacy of vaccination? For years I was in the way of coming in contact with smallpox constantly and this was my only protection. Some of you have put it to similar test.

This slide shows an eighth day vaccination. I show it to say that while a female infant might be vaccinated up over the deltoid muscle where the scar will perhaps be less conspicuous as a rule it should be done at the insertion of the deltoid; do not vaccinate over a muscle because use of the muscle will make pressure on the lesion and cause irritation. Also don't make two insertions so close together; they should be an inch and a half apart and the second over the posterior edge of the muscle. Multiple vaccinations are justifiable for the sake of assurance of success where a person has been exposed to smallpox.

As to the technique of vaccination: after the site has been washed with soap and water, then with alcohol and then with

sterile water, a single tear one-fourth inch long should be made with sterile needle or scalpel through the scarfskin only down to the lymph spaces of the rete; cross hatching is not allowed. Vaccination by puncture appears to me a good way, done as follows: the virus is expelled on the arm and minute punctures through it made with the instrument held almost parallel with the surface, the virus being then wiped off down the line of puncture.

The best dressing is a clean fresh washed and ironed handkerchief pinned to the sleeve, or a fold of sterile gauze held on with a strip of adhesive plaster. Cleanliness and avoidance of handling are the chief protection. In almost every case of bad result that I have seen the cause has been from lack of this.

This legend tells who not to vaccinate. "Any one well enough to go to school is well enough to be vaccinated." Any one recently exposed should be vaccinated regardless of condition. A mother in Utica developed smallpox a week before giving birth to a child; the child was vaccinated when two days old with success and no untoward result. Near the same time I saw a baby fatally ill with smallpox whose mother had mild, unrecognized smallpox just before its birth. Generally vaccination should be deferred in one having acute skin eruption such as eczema. Jenner said that any vesicular eruption was a contraindication. A fair condition of health will conduce to a more orderly result. Vaccination is protective if it has reached its eighth day, while smallpox will not develop until twelve days after exposure.

Let me read you an interesting advertisement which I have found, from a copy of *The Albany Register* of July 13, 1813.

VACCINE MATTER.

"The subscriber having been appointed by the President of the U. States Agent for Vaccination hereby gives notice that GENUINE VACCINE MATTER will be furnished to any physician or other citizen of the U. States who may apply to him for it. The application must be made by post, and the requisite fee (five dollars) in the current bank paper of any of the middle states forwarded with it. When required such directions, etc., how to use it, will be furnished with the matter as will enable any discrete person who can read or write to

secure his own family from the smallpox, with the greatest certainty, and without any trouble or danger.

All letters on this subject to or from the undersigned, and not exceeding half an ounce in weight, are carried by the U. States mail free of postage, in conformity to a late act of Congress, entitled 'An Act to Encourage Vaccination.'

"All newspapers in the U. States are requested to publish the above once a week for three weeks and payment for the same will be made.

" JAMES SMITH,
" *U. S. Agent for Vaccination,*
" Baltimore."

In this connection let me give you a little personal history. In the spring of 1869 when I was a third-year medical student, in New York, a house-to-house canvass of that city for vaccination was made, and I received an appointment on the work. I could tell an interesting story of my experiences for I was assigned to serve under a health inspector whose district took in all between Broadway and Bowery from Houston Street to the old Five Points, and we were expected to visit every family, ascertain whether they were vaccinated, and vaccinate all who were willing to be. The work was under the direction of Dr. Elisha Harris who met us in weekly conferences; he was an enthusiast in vaccination. When, in 1880, the State Board of Health was established Dr. Harris was made its executive head here in Albany and very naturally I renewed my acquaintance with him; soon he asked me to assist him and I began the congenial connection with that Department which, for many years quite active, has been unbroken till now. This is a lengthy introduction to an episode in this subject in which I had a minor part. Up to 25 or 30 years ago humanized virus was almost solely used either by arm to arm vaccination but more generally with the dried crust. There were no general purveyors of vaccine. In 1871 Martin, of Boston, began the propagation of animal lymph. About the same time the New York Dispensary established an animal vaccine service of which Dr. Frank P. Foster, long editor of the *New York Medical Journal*, was made director for a time experimentally and later for distribution. He maintained it, from a start with the Beaugency stock,

through an unbroken series of calves. It was his desire to introduce this to the profession through selected individuals rather than retail apothecaries and I became his agent here through Dr. Harris. I have and prize his first letter written in 1882 in which he tells of his work and the virus. He had for reasons he does not give become dissatisfied with quill slips and instead used slips of wood covered with some sort of glazing to keep the lymph from sinking into the wood. There was then no thought of treating the virus with glycerine and the lymph was collected directly from the fifth day vesicles of the calf, which he certainly did with scrupulous care. These when dry were fastened on cards of twenty and enclosed in air-tight wrappers. He directed that the slip be moistened with cold water, the epidermis scraped, not cut or scratched, with a lancet and the moistened lymph rubbed in for a minute or more. No mention was made of washing the skin, or using sterilized water; disease germs had not come much into evidence in the earliest '80s. The virus was effective, but worked rather harshly. It took a good while to get doctors to pay 20 cents for a vaccine slip when they could get a good crust of their own collecting from an arm and perhaps carry it around in a wallet for months ready for use.

It has been said that Bovine Virus is more effective than that long humanized but Dr. Harris and I about this time obtained some from Dr. Snow, of Providence, who was maintaining a series of human vaccinations, developed from a stock which he secured from the Jennerian Society of London, which had kept an unbroken series of arm-to-arm vaccinations with virus received direct from the hand of Jenner. This long humanized virus I found working uniformly and normally, causing moderate reaction and always showing the typical oval, amber-colored crust and foveated scar, and I never had reason to doubt its efficacy.

Editorial

"IN ALL THEIR AFFLICTION HE WAS AFFLICTED
AND THE ANGEL OF HIS PRESENCE SAVED THEM."

TO THE GLORY OF GOD
AND
IN MEMORY OF
HELEN FRANCHOT DOUW
THIS BUILDING IS ERECTED
BY HER HUSBAND
J. TOWNSEND LANSING
A. D. 1898

So reads the tablet dedicatory of Pavilion D of the Albany Hospital. By his death the building becomes a memorial to the husband as well as to the wife, and bears a double significance in its tribute to the character of the donor. A long life of benevolence is symbolized in the unwitting revelation of the guiding impulse to relieve suffering, particularly poverty and sickness. It was the warp and woof of his nature, and through all his activities, and they were many, commercial, social, civic, ran this thread of intense, unobtrusive, human sympathy. It found its ultimate demonstration and its greatest opportunity in the medical institutions of the city, the hospital, the college and the laboratory, with which Mr. Lansing became most intimately identified, and to which he gave the best energies of his later years. In 1897 he became a governor of the Albany Hospital, and in 1904 its president. The fifteen years of his administration were years of evolution of eleemosynary institutions, and growth of this kind, not only in physical structure, but in the progress and change of scientific thought and of medical and surgical practice, is inevitably involved in difficulty and doubt. Physicians are said to be pugnacious. This is in some measure true. The daily contest against the foes of health, the sudden and unexpected demands upon resourcefulness and rapid action, faith in personal experience, all tend to the development of aggressive personality. Pride of opinion and sensitiveness to censure are the inevitable



J. TOWNSEND LANSING

Albany Medical Annals
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effects of their training. The piloting of a growing hospital through the shoals of conflicting theories, discrimination between enthusiasm and error, prevention of bitterness and resentment, are no small part of the task of the executive of such an institution. As the hospital grew Mr. Lansing grew with it. The position he held may in many ways be regarded as the highest to be attained in the city of Albany. Its incumbent becomes such only by merit, and by a process of gradual selection. By his moderation and courtesy, by his unvarying responses to every call of duty, by his gentle firmness, Mr. Lansing was an ideal president, and to the high responsibility of the office he assumed, has been added the dignity he imparted to it.

As a Trustee of the Albany Medical College Mr. Lansing comprehended and promoted the effort to coordinate the school and the hospital into a combined institution of medical education and research. His experience with doctors and practical medicine had freed him from whatever prejudices, as a layman, he might have held against the use of the wards for teaching, and he saw and realized the benefits of research and study as stimulating the best efforts and promising the best results, not only for the institution but for the patients themselves. His efforts in this were grounded in faith in Albany as an educational centre, and when existence of the College was threatened by the need of more expensive equipment, radical changes in methods, and later by the stringency of the war, he was one of the few whose hope never faltered, and before his death he had the satisfaction of seeing the promise of restitution and of realization in the near future of the ideals he had cherished.

One wonders why a man whose life is laid in conditions of ease and comfort should burden himself with wearing and persistent responsibilities; should voluntarily enter upon scenes of contention and difficulty, when all sources of friction might be avoided; should engage in tasks, too often unrequited, and too often misinterpreted, when a path of simple ease might be chosen. The only answer is the presence of some inherent, God-given goodness. In Mr. Lansing it was plainly a sense of duty. He sought no fame and he asked no reward. He was sometimes pained that his unselfish efforts were subjected to the crude and

unprincipled criticism or attacks of cheap seekers for personal advantage, but he allowed these casual incidents no weight in his determination to proceed upon his own judgment. And so, as the events of his life gradually shaped themselves, he was directed by the force of circumstances and by the involuntary reaction of his nature, to the place he was best fitted to occupy, and to the realization of the purpose he was plainly destined to perform as a benefactor of his kind. No one knows what were his private charities. It is not necessary that they be known. He guided the advance, by intimate personal acquaintance with its details, of a large hospital. He shaped the policies of its administration, he arbitrated the differences of medical opinion of its staff, he encouraged and promoted the best professional sentiment of its nurses. The ultimate influence of such high purpose is beyond estimate. The good things that he did will live long after him, and streaming out in countless channels will give comfort and relief to countless sufferers.

Mr. Lansing allowed himself only one indulgence. He was a lover of the beautiful in art. His large collection of paintings was frequently exhibited in the Historical and Art Society for the pleasure of the public. He enjoyed displaying these treasures to friends in his home, and he seemed to have obtained them for the delight of others. And so his avocations became the objects of his life, and his commercial interests, though carefully managed, were subordinate. He was, in the exact meaning of the word, a philanthropist.

There are traditions of communities whose character and purpose are typified in one individual. The fact of such an incarnation is as rare as the fiction is agreeable. If a stranger in Albany were to have asked, at any time during the last ten years, where might be found the man who best typified the thought, feelings, history and ambitions of this old city, there might have been pointed out to him the unassuming gentleman of this sketch, walking rather rapidly and in meditation from one to the other of his numerous appointments. The simplicity of his manner, his cordiality, his inquisitiveness into detail, his manifest desire to obtain all the information necessary to correct judgment, gave evidence of single-mindedness and integrity. The medical pro-

fession of Albany owes much to Mr. Lansing, the city more. He reached perfection, in so far as a human being may reach perfection, in his demonstration of fidelity to the good, the true and the beautiful.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF JULY, 1919.

Consumption	8	Bright's Disease	16
Typhoid Fever	1	Apoplexy	7
Scarlet Fever	0	Cancer	15
Whooping Cough	3	Accidents and Violence	10
Measles	0	Deaths under 1 year.....	8
Diarrheal Diseases	3	Deaths over 70 years.....	30
Pneumonia	1	Death rate	11.25
Broncho Pneumonia	1	Death rate, less non-residents	9.20

Deaths in Institutions.

	Non-res.	Res.		Non-res.	Res.
Albany Hospital	14	6	Public Places	1	3
Albany Hospital Camp .	0	1	St. Margaret's House ..	2	0
Albany County Hospital	0	1	St. Peter's Hospital	5	2
Federation of Labor					
Camp	0	1		31	22
Homeopathic Hospital .	5	5			
Home for the Aged....	0	1	Births		148
Hospital for Incurables .	3	1			
Maternity Hospital	1	1	Still Births		4

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	3	Tuberculosis	18
Scarlet Fever	13	Mumps	10
Diphtheria and Croup.....	3	Pneumonia	9
Chickenpox	5	Influenza	0
Smallpox	0	Septic Sore Throat	9
Measles	33	Cerebro Spinal Meningitis ..	2
German Measles	0		
Whooping-cough	11	Total	116

Number of days quarantine for scarlet fever:			
Longest.....	57	Shortest.....	30
		Average.....	35½
Number of days quarantine for diphtheria:			
Longest.....	42	Shortest.....	15
		Average.....	22
Fumigations			
Rooms	141	Buildings	94
Milk bottles disinfected			670

MISCELLANEOUS.

Cards posted for communi-		Inspections and reinspections	40
cable disease	34	Vaccinations	3
Cards removed	82	Vaccination dressings	11
Notices served on schools...	0	Children examined for em-	
Notices served on stores and		ployment certificates	129
factories	34	Number of employment cer-	
Postal card returns sent to		tificates issued	129
doctors	34		
Postal card returns received			
from doctors	34		

Tuberculosis.

Living cases on record July 1, 1919.....		864
Cases reported:		
By card	14	
Dead cases by certificate.....	4	18
		882
Dead cases previously reported	4	
Dead cases not previously reported.....	4	
Removed	2	10
		872
Living cases on record August 1, 1919.....		
		872
Total tuberculosis death certificates.....		8
Visits to cases of tuberculosis.....		27
Miscellaneous visits		25

LABORATORY REPORT.

Diphtheria.

Initial Positive	11	Unsatisfactory	10
Initial Negative	227		
Release Positive	30	Total	348
Release Negative	70		

Sputum for Tuberculosis.

Positive	41	Unsatisfactory	0
Negative	116		
		Total	157

Widals.

Positive	2	Unsatisfactory	1
Negative	20		
		Total	23

Meningococcus.

Positive	0	Water analyses	2
Negative	0	Pathological examinations .	0
		Gonorrhea examinations ...	53
Total	0	Miscellaneous examinations.	0
Wassermann tests	233	Total examinations	1,061
Milk analyses	245		

DIVISION OF SANITATION.

Complaints	91	Reinspections	93
Inspections	80	Plumbing	23
Plumbing	21	Sanitary	70
Sanitary	59		

HEARINGS.

Hearings	3	Cases heard	3
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Class of Cases.

Filthy premises	3
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DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections	123	Smoke	0
Old houses	61	Blue or red	2
New houses	62	Peppermint	3
Permits issued	67	Water test	9
Plumbing	59	Houses examined	34
Building	8	Re-examined	95
Plans submitted	27	Valid	26
Old buildings	11	Without cause	8
New buildings	16	Violations	0
Houses tested	14		

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	9	Cats removed	97
Dogs removed	24		
			Total
			130

DIVISION OF MARKETS AND MILK.

Public market inspections	26	Milk cans inspected	416
Market inspections	88	Milk cans condemned	0
Fish market inspections	9	Lactometer readings	107
Fish peddler inspections	0	Temperature readings	107
Slaughter house inspections ..	3	Fat tests	0
Rendering establishment in- spections	0	Sediment tests	46
Pork packing house inspections	2	Chemical tests	0
Hide house inspections	0	Cows examined	652
Milk depots inspected	16	Cows quarantined	0
Stores inspected	47	Cows removed	12
Dairies inspected	59	Complaints investigated	0
		Milk houses inspected	59

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—STATISTICS FOR JULY, 1919.—Number of new cases, 107; classified as follows: Charity cases, 19; cases, moderate income, 37; metropolitan, 51; prenatal (no charge for call), 20; dispensary, social service, 70; tuberculosis, 29; cases carried from last month, 136; total number of cases under care during month, 469. New cases classified according to diseases: Medical, 42; surgical, 17; obstetrical (a) prenatal, 20; (b) confinement, 29; (c) maternity, 2; no diagnosis. Disposition: Removed to hospital, 7; died, 7; discharged cured, 72; discharged improved, 10; discharged unimproved, 0; discharged to other care, 16; to dispensary, 1; number of patients still under care, 239. Cases reported by: Physicians, 31; metropolitan, 38; patients, families or friends, 23; nurses, 10; homeopathic social service department, 10; other sources, 2; dispensary, 4.

Special Obstetrical Department.—Number of obstetricians in charge, 0; number of students in attendance, 0; number of new cases this month, 0; number of nursing visits, 0.

Visits of nurses (all departments).—Number of visits with treatment, 940; number of social service, 115; number of prenatals, 68; number of tuberculosis, 70; number of other visits, 101; venereal calls, 9; total number of visits, 1,409.

Metropolitan Report.—Number of metropolitan calls, 306; checks received for last month's calls, \$242.40.

Monthly Report.—Number of clinics held, 69; number of new patients, 63; number of old patients, 445; total number of patients treated during month, 508. Classification of clinics: Prenatal, 4; surgical, 14; nose and throat, 7; eye and ear, 14; skin and venereal, 8; medical, 8; tuberculosis, 5; dental, 0; nervous, 0; children, 1; gynecological, 8. Special tuberculosis department: Number of new patients, 29; number of dispensary patients, 12; number of patients sent to hospitals, 9; number of patients returned from hospitals, 3; number of patients dead, 29; number assisted with milk and eggs, 3.

Tuberculosis Report.—Total number of new patients, 29; dispensary, 12; other sources, 17; total number of calls, 70; number of patients sent to hospitals, 9; number of patients returned from hospitals, 3; number of patients died, 29; number of patients assisted with milk and eggs, 3.

Dispensary Report.—Number of clinics held, 5; number of new patients, 12; number of old patients, 6; total number, 18; number of prescriptions, 7; physicians attending: Dr. Hawn, 4; Dr. Faust, 1.

Hospital Social Service Report.—Number of cases investigated, 26; number of calls to hospital wards, 10; number of calls to dispensary, 3; number of co-operating calls, 4; number of calls to patients' homes, 28. Disposition of cases: Referred to Associated Charities Department, 1; reported to private physician, 2; referred to general nursing service, 1; referred back to dispensary, 2; discharged, dead, 1; discharged to reformatory, 0; discharged to tuberculosis department, 1; discharged O K to go home, 11; discharged, Home for Feeble-minded, 0; discharged, moved out of town, 1.

KINEMATIC SURGERY IN MILITARY HOSPITALS.—Remarkable results have been achieved in Italian Military Hospitals recently by the use of what is known as "kinematic surgery" the invention of Professor Putti of Bologna university. Professor Putti's methods have aroused intense interest on the part of American doctors attached to the Balkan Commission of the American Red Cross who are supervising the artificial leg factories already established and being established in Athens, Salonica, Belgrade and Bucarest for the war's mutilated.

At the present moment the Allied soldiers in the Balkans who have lost their limbs are being fitted with artificial legs and arms of a type similar to that employed by Sarah Bernhardt. Prof. Putti's methods, however, are a distinct advance over all other artificial appliances.

His treatment of amputated limbs consists of a unique preparation of the stump to develop a "motor" end to the cords which, after being bound together over a smooth "bearing" of bone, get as much as a three inch travel of the leg by means of a reeducation and coordination of the muscles of the stump.

After the stump heals, Professor Putti cuts out a flap of flesh which he folds back into an incision to take the flap. This is allowed to heal and

then, through the loose flap of flesh, a metal bar with attachments to operate the artificial limb below is suspended.

The muscles of the calf and thigh readily respond after some weeks to the movement of the artificial leg and soon the pressure of the swinging of the artificial leg reeducates the muscles through the flap of flesh so that it may be said that the muscles of the stump actually operate by themselves the mechanical features of the artificial limb.

In case of a severed hand the muscle groups surrounding the bone are trained to operate catgut cords, which in turn, operate artificial fingers. Not since the introduction of "debridement" in American Army medical work in France has any medical innovation created so much comment.

"TYPHUS TRAIN" AIDS RUSSIAN REFUGEES.—A specially equipped "typhus train" financed by funds supplied by the Interallied Sanitary Commission and managed by the Red Cross, has travelled from Vladivostok to the Ural Mountains, its staff of doctors and nurses ministering to persons afflicted with the malady and instructing the people in preventive measures. At the present time this train is operating among the soldiers of the Kolchak government on the Perm front. Many carloads of drugs and medical supplies have been provided for the men of the Russian army. A special Red Cross mission which recently made a survey of the situation in western Siberia found that many of the hospitals had been stripped of drugs, instruments and surgical dressings. The Red Cross is equipping these institutions. In all, about forty tons of drugs have been shipped from America since last September.

About 1,500 refugees remain in and around Vladivostok and these have been concentrated in barracks a few miles outside of the city. Labor is in demand around Vladivostok and this fact has greatly reduced the number of refugees.

DR. GARVIN DECORATED FOR SERVICES IN FRANCE.—Major ALBERT H. GARVIN chief of the Bureau of Tuberculosis, Medical and Surgical Department with the American Red Cross forces in France, has been decorated with the Medaille d'Honneur de Vermeil of the French government in recognition of his services to that country. Major Garvin, who went to France in September, 1917, was superintendent of the New York State Hospital for Tuberculosis for ten years. He returned to America late in June.

PERSONALS.—Dr. HENRY L. K. SHAW (A. M. C., '96), 361 State St., Albany, N. Y., announces his resignation as Director of Child Hygiene of the State Department of Health and will devote his entire attention to the prevention and treatment of diseases of children in private practice.

—Dr. CLARENCE J. SLOCUM (A. M. C., '97), announces a reorganization in the management of Craig House, a private hospital for nervous and mental cases, at Beacon, N. Y. Dr. Robert B. Lamb (A. M. C., '91) retired from the organization on July 1st, and his interest has been ac-

quired by Dr. Edward G. Stout (A. M. C., '96), recently senior assistant physician at the Utica State Hospital.

—Dr. WALTER H. CONLEY (A. M. C., '91), is General Medical Superintendent of the Department of Public Charities, New York City, with office at Blackwell's Island.

—Dr. PAUL V. WINSLOW (A. M. C., '08), is now in practice at 616 Madison Avenue, New York City.

—Dr. ORLA A. DRUCE (A. M. C., '09), has removed his office to 542 Central Avenue, Albany, N. Y.

—Dr. JOHN S. McCORMICK (A. M. C., '14), has removed his office to 508 Madison Avenue, Albany, N. Y.

—Dr. RAYMOND F. KIRCHER (A. M. C., '17), after service in St. Francis Hospital in Westport, Conn., has opened his office at 5 DeWitt Street, Albany, N. Y.

—Dr. WILLIAM J. WANSBORO (A. M. C., '95), after returning from military service, has resumed general practice at 226 Lark Street, Albany, N. Y.

—Dr. ROBERT B. LAMB (A. M. C., '91), formerly Physician in Charge of Craig House and President of Craig House Corporation since its organization, announces his withdrawal from these services and will receive a limited number of selected patients for care during the summer months at "Onawaawek," Chazy Lake, in the Adirondacks.

MARRIED.—Dr. JOHN HOURNE ROBERTSON (A. M. C., '17) and Miss Jean Tait, formerly instructor in biological chemistry in the Albany Medical College, were married June 19, 1919, at the residence of the bride's parents, East Haven, Conn. Dr. and Mrs. Robertson will live in Johnson City, N. Y.

In Memoriam

CHARLES FREDERICK MYERS, M. D.

Dr. CHARLES FREDERICK MYERS, a graduate of the Albany Medical College of the year 1910, and Dr. William P. Sweeney, of the class of 1915, suffered violent deaths on the morning of July 30, 1919, in an automobile accident in New Scotland avenue, Albany. The machine struck a rut, swerved across the street, crashed into a tree and was demolished, with frightful mangling of the victims and probably instantaneous death.

After graduation Dr. Myers served as interne in the Albany Hospital, and then engaged in general practice in the city of Albany. He was an attending surgeon at St. Peter's Hospital, and was coroner's physician of the county of Albany. Dr. Myers is survived by his wife.

WILLIAM P. SWEENEY, M. D.

Dr. SWEENEY died in the automobile accident which was fatal to both himself and Dr. Myers. Dr. Sweeney was a native of Saratoga, gradu-

ated in 1910 from the Saratoga High School, and in 1915 from the Albany Medical College. He was an interne in the Bellevue Hospital, and in 1916 enlisted for immediate overseas duty in the British Expeditionary forces. On Christmas Day, 1917, he returned to America, and afterward received a first lieutenant's commission in the United States army and went to France. He was later promoted to the rank of captain. The accident which caused Dr. Sweeney's death occurred five days after his discharge from military service, and he was on his way to his home when he stopped for the visit with Dr. Myers. Two sisters and a brother survive him.

DORMAR BALDWIN, M. D.

DORMAR BALDWIN, M. D., a graduate of the class of 1877 of the Albany Medical College, died at his home in Oneonta, N. Y., on June 26, 1919.

Dr. Baldwin began active practice of medicine at South Worcester, N. Y., immediately after graduation, and in 1880 removed to Jamestown, N. D., where he remained for twenty-seven years. He then returned to New York, and retired from practice after having made his residence in the city of Oneonta. He had a large and varied experience in Dakota when it was a territory with a scattered population and only small towns and no cities. He was appointed a surgeon for examination for soldiers' pensions in 1880, and afterward became a member of examining surgeons for pensions, which position he held until 1908, when he resigned. Dr. Baldwin was born in North Blenheim, N. Y., in 1848. He married Miss Flora Shearer, of Oneonta, N. Y., in 1905. There were no children.

NEW YORK STATE MEDICAL LIBRARY

Edited by Frances K. Ray.

EVENING OPENING—With the beginning of the college year, September 22d, the Medical Library will resume full evening service, opening from 9 a. m. to 10 p. m. daily, except Sundays.

NEW BOOKS which come to the library from time to time on approval will be on exhibition at the librarian's desk for a limited period after the receipt of each shipment. Physicians are invited to inspect them and those interested in the selection of books for this library will confer a favor by giving the librarian an estimate of their value for purchase.

Publishers' catalogs and book review notes are always on file, available for consultation by any one seeking information for personal use.

ALBANY MEDICAL ANNALS

Original Communications

THE NEUTROPHILIC GRANULES OF THE CIRCULATING BLOOD IN HEALTH AND IN DISEASE. A PRELIMINARY REPORT.

Read at the Annual Meeting of the Medical Society of the State of New York, at Syracuse, May, 1919.

BY G. S. GRAHAM, M. D.

(From the Pathological Laboratories of the Albany Hospital and the Albany Medical College)

The cytoplasmic granules characteristic of the myeloid cell series occur in the circulating blood of man as three types, neutrophilic, eosinophilic, and basophilic. It is probable, however, that only the first two of these types should be considered as true granules in the strict sense of the term. In a paper to appear elsewhere evidence is brought forward that is believed to indicate strongly that the gamma granule is derived from the eosinophilic and rarely perhaps from the neutrophilic type through some obscure change in the granular substance presumably of a degenerative nature. Under this conception the type represents only a physiologically inactive pseudo-granule and its containing cell, the basophile, is not a functioning leucocyte but a degenerating cell probably having no part to play in the general scheme of normal leucocytic activity. The eosinophilic leucocyte participates only to a minor degree in the disturbances of leucocytic equilibrium excepting in a few well recognized conditions of somewhat special type and it is evident that the irritants capable of mobilizing it form a restricted group of noxious substances. The neutrophile remains then not only

as the form numerically predominant in normal blood but also as the most active of the granulocytes in a physiological sense. Upon it falls the main burden of the protective response to toxic conditions affecting the local or general bodily metabolism and the study of the leucocytic reaction to various acute inflammatory conditions is largely a study of the neutrophilic variation.

During the past twenty years much attention has been devoted to the study of the blood changes consequent upon infection. On the cytologic side such study has concerned itself very largely with the numerical fluctuations in the leucocytes. At first only the "total" leucocyte count was used but this was soon supplemented by the more informing "differential" count and then the correlated study of both these factors appeared as an attempt at the more exact definition of the principles underlying the phenomena of leucocytosis. Despite the great value of these studies both in the general information derived from them and in the more immediate value of their results as practical and valuable aids in determining questions of diagnosis and prognosis there still appear many unexplainable discrepancies between the conclusions drawn from the blood count and the clinical course of infectious conditions. And it is not to be wondered at that such discrepancies should occur. So far as analogy is concerned, it is after all somewhat surprising that we should expect so much from the mere enumeration of the cells in the circulating blood, for such observations leave out of account almost entirely any consideration of the finer morphologic changes that may take place in the cells of the type most concerned in the cellular reaction that is taking place. The blood is a tissue and the tissue microscopist would scarcely draw any conclusions from an examination of a section in which he had merely counted the number of cells without at the same time noting any changes discoverable in their morphologic appearance. The body tissues in general exhibit characteristic reactions to stimuli that are entirely comparable with those that may be observed in the blood but the character of the reaction, the intensity of the stimulus provoking it, and the probable end result of the phenomena set in motion are indicated not by the number nor by the relative percentage of the various cells present so

much as by the morphologic changes evident in the individual cells of the type most concerned. While the analogy cannot be carried over intact into hematology it may still serve to illustrate the point that we should search for some factors of leucocytic variation other than the merely numerical ones to serve us as guides in the interpretation of the varying blood picture found in disease conditions.

Arneth suggested a morphologic factor when he proposed his "nuclear index" as a basis for the interpretation of the leucocytic response to infection. He postulated that the relative age of a given neutrophile may be judged according to the number of segments exhibited by its nucleus. The nucleus of the earliest or youngest leucocytic form as it enters the blood from the bone marrow is a single mass. This mass subdivides into two, three, four and finally five or more lobes as the cell grows older. Starting from this point he determined what he believed to be the "nuclear index" of the normal blood, pointed out what he believed to be the effect of toxic conditions in causing a relative increase in the younger cell forms and maintained that in a given case of infectious disease, and particularly in tuberculosis, the degree of toxemia present may be judged according to the extent of the relative increase in the cells of the single or bi-lobed nuclear types. The validity of Arneth's fundamental conception has not been seriously questioned and the conclusions based upon it appear to be essentially sound but the nuclear index has not received any general acceptance as a practical aid in clinical work despite the fact that it is usually admitted, even by those reporting doubtfully or unfavorably upon its use, that the indications derived from it may occasionally be of distinct value both in diagnosis and in prognosis.² Here again it is not surprising that the unsupported figures of the Arneth index should prove misleading in some cases for we can hardly doubt that there is much more to the mechanism of leucocytosis than the mere question of the age of the individual cells.

Continuing the classical analogy a moment longer, may it not be that we should investigate not only the number of our troops, not only their average age but also their physical condition or fitness? Should we not, in other words, attempt a study of the finer

morphologic changes that may occur under conditions of disease not so much in the nucleus as in the cytoplasmic structure? From analogy with the general facts of cellular changes everywhere observed as the result of the action of stimulative or destructive agents upon the body cells it would be logical to expect that the active and highly sensitive neutrophile should show degenerative cytoplasmic changes as the result of the action upon it of stimuli capable of exciting it to the degree evident in well developed cases of hyperleucocytosis. However active may be the withdrawal of damaged cells from the circulation it would seem unlikely that the laboring organism of severe infectious toxemia can maintain its circulating leucocytes intact. Reports of observations bearing upon this point are not lacking in the early literature. Cytoplasmic as well as nuclear degenerative changes were reported by the pioneer workers in hematology. In general these were interpreted as evidences of peptization, coagulation or disintegration of reticulum or hyaloplasm. Added to them were changes affecting the characteristic granules of the marrow cell series. These might consist merely of changes in the staining reaction toward aniline dyes or the granules might disappear in whole or in part. It is still accepted that degenerative changes of these general types may occur in the cells of the circulating blood in myelogenous leukemia but for the most part hematologists have ceased to give them more than passing attention in the case of the leucocytoses proper. Occasional references to certain of these changes do continue to appear but for the most part there is an attitude of scepticism toward their recognition. This is due no doubt to the realization that such conclusions must be drawn cautiously when they are based merely upon the study of the cells in blood smears. No matter how careful the technic employed in its preparation it is practically impossible to avoid artefact production in the blood film and added to this difficulty there is the further handicap that the stains in common use are notoriously capricious in their action. This variability in the stain works particularly against the satisfactory study of the granules.

But it is exactly in this particular of a successful granule staining that the so-called oxidase or peroxidase methods promise

to prove of value and the striking emphasis laid by them upon the granular content of the neutrophilic cytoplasm inevitably suggests the desirability of reopening the old question as to whether or not changes may be demonstrable in these granules under various conditions of infectious or non-infectious toxemia.

Little is known as to the nature or purposes of the leucocytic granules. They were regarded by Ehrlich as reserve material stored in the cell for eventual use in the processes of cellular metabolism and on the other hand they have been regarded by others as some extraneous material having no vital connection with the cell life or as excretory substances the product of katabolism. Again they have been considered as of secretory nature, representing a substance specifically elaborated by the cell and having some definite part to play in its general or special physiological activities. Hankin saw in them the source of the alexins and this idea has been favorably received by other workers. While there is nothing beyond inference and analogy to support one or another opinion as to just what rôle is actually played by the granular substance, the idea that it is concerned in some more or less direct way with the antibacterial or antitoxic defense is at least most attractive. Very marked changes in the granules may readily be determined by the study of leucocytes engaged in phagocytosis, as for example in opsonic preparations or in smears of pus. Smears from an active case of gonorrhea are very satisfactory. When such preparations are stained with a "peroxidase" reagent interesting examples of the more or less complete disappearance of the granules from individual cells may be obtained. While exceptions may occur, it may be stated in general that the granules disappear from the leucocytes progressively as the number of bacterial inclusions in the cell increases. The significance of this granular failure is not clear. It might be explained, perhaps, on the basis of any of the above theories of granular significance and it may merely indicate a change in the hydrogen ion concentration of the cytoplasm consequent upon phagocytic activity but it seems not impossible that a careful study of the phenomenon might provide a possible starting point for a morphological study of the mechanism involved in phagocytosis that might approach the question

from a direction somewhat different from those previously followed.

In the benzidine method of granule staining the benzidine may be said to act toward the granular substance as a color indicator. When it is applied to the leucocytes in the presence of traces of hydrogen peroxide a reaction takes place as a result of which a permanent brown dye is set up and this becomes fixed in or upon the granule mass. Simple counterstaining completes the procedure necessary for a satisfactory cytological preparation. The method has been described elsewhere⁶ but may be summarized briefly as follows: the perfectly fresh smear is fixed for a few seconds in a fresh mixture of one part of forty per cent formaldehyde in nine parts of ninety-five per cent alcohol; washed in water; and stained for five minutes in the benzidine solution. This is made up freshly as used by adding a few crystals of chemically pure benzidine (the Merck preparation has been used) and 0.02 cubic centimeter of an active hydrogen peroxide (U. S. P.) to 10 cubic centimeters of forty per cent alcohol. Or, although this is somewhat less desirable, a two-tenths of one per cent solution of benzidine in forty per cent alcohol can be made up in sufficient quantity for one or two weeks' supply and the peroxide can be added to small portions of this stock solution as they are withdrawn for use. Five minutes has been adopted as the standard staining time. The preparation is now washed thoroughly under the tap, counterstained, washed in water and dried. Methylene blue was originally recommended as the counterstain but this has been replaced in recent work by the Fitcher-Lazear carbol-thionin, which gives a sharper nuclear stain and a more pleasing color tone to the slide in general. It is made up by adding 20 cubic centimeters of a saturated solution of thionin in fifty per cent alcohol to 100 cubic centimeters of a two per cent aqueous solution of phenol. The mixture should be allowed to stand for a day or two before being used. A sharp stain may be obtained in one to two minutes.

Long exposure to the benzidine solution will result in a slight diffuse brownish coloration of the erythrocytes and possibly of the megakaryocytes of the bone marrow but no other evidence

of a non-specific staining of any of the body cells has been observed under the technic employed for blood smears or tissues. On the other hand, great emphasis is laid upon the cells of the marrow series. These stand out in bold relief so that they lend themselves well to morphologic study. Since also the granular staining appears to involve a distinct chemical reaction between some granular or cytoplasmic constituent and the indicator or staining agent and is not merely the less specific combination between a dye and some coagulated cellular material such as is made use of in the usual histological methods, the present procedure would seem to offer a certain amount of evidence as to the vital condition of the granule or its containing cell.

The position here taken, it may be pointed out, does not commit us to any dogma as to the nature of the granular substance nor as to the ultimate explanation for the reaction in question. The leucocytes are credited with harboring a rather formidable array of enzymes. Whether the observed reactions on which these claims are based are due in every case to enzymatic activity or merely to the influence of "unorganized" catalysts of organic or even in some cases of inorganic nature is not certain. So far as concerns the substance responsible for the color reaction that we are considering, the general characteristics exhibited by it, including its susceptibility to the action of certain physical and chemical agents such as dry heat, sunlight, acids and alkalis, concentrated alcohol, mineral salts, etc., are much like those of the true enzymes, but there are still weighty considerations against its unqualified acceptance as such a body. It is uncertain whether this substance does or does not form a part of the granule mass proper. Presumably it does, but nothing is known certainly as to the facts of the case. Finally, it has been questioned whether we are justified in holding to the older assumption that the reaction involved is one of direct oxidation of the indicator by the granular substance. All these questions are of interest and their solution may go far toward clearing up many questions relating to the leucocytes and their activities, but for our present purposes we may disregard them while holding merely to the empiric observation that under the conditions

named above it is possible to stain the leucocytes in such a manner that their granules are prominently displayed.

An examination of the leucocytes in normal blood as stained by the benzidine method will show that not all the neutrophiles appear equally supplied with granules. The cytoplasm of the individual cell may be densely crowded with them; again they may appear in a more open pattern; while in other cases more or less well defined columns or fields of empty cytoplasm may shine through between the opaque clumps or chains of stained particles. In disease some of the cells may show very few granules or may even be entirely devoid of anything but shadowy remnants of them. Comparable changes occur within the tissues in acute inflammatory exudations.

The questions suggested by this variation in the granular quota of the individual leucocytes and particularly the marked changes occasionally seen in severe infectious toxemia led some time ago to an attempt at the experimental production of granular changes in the blood of animals. The animal chosen for the work was usually the white rat since his leucocytes approach those of man in their granule characteristics more closely than do those of the other small laboratory animals. In the guinea pig and rabbit the "special" granules are few and scattered even in the normal polymorphonuclear cell and it is difficult to determine changes in them. Benzol was first chosen as a toxic agent that might be expected to have some direct action upon the leucocytes. It was given by subcutaneous injection to seven rats and by inhalation to three. In spite of heavy dosage and continued treatment no leukopenia such as is characteristic of the benzolized rabbit was obtained in the injected animals excepting to a minor degree in one case, nor were any undoubted granule changes determined. There was possible granule failure in the inhalation-treated animals and in one of these that succumbed after daily exposure for twenty-five days there was a terminal white count of 3,300 and an apparent deficiency of reacting granules in the cells of the bone marrow. A benzol leukopenia was obtained in two rabbits but no decided granule changes could be made out in the leucocytes of the circulating blood. Similar failure attended the exposure of rabbits and

guinea pigs to chloroform narcosis as well as the treatment of white rats with heavy doses of the X-ray. Somewhat more encouraging results followed the subcutaneous injection of a hemolytic streptococcus and of a freshly isolated staphylococcus into a small series of white rats. The subcutaneous injection of a non-fatal dose of streptococcus was sometimes followed in one or two hours by a definite failure of the granules in the circulating leucocytes while with recovery from the toxemia the granules reappeared in unusual numbers. On the whole, however, the technical difficulties encountered were found to interfere with any satisfactory study of the blood picture, particularly in regard to the relation of the suggested granule changes to the numerical fluctuations in the white count and the polymorphonuclear percentage, and the study was abandoned. The experimental work thus briefly summarized was carried on two and three years ago. The staining method then employed was probably not so well adapted to its purpose as the one now used and the extent of the granule change that may be expected to occur was perhaps conceived of as greater than would now be demanded. It is possible that a repetition of the experiments might now yield more illuminating results, but at the time these were judged to be too inconclusive to warrant further trial and the added technical difficulties referred to were sufficient to discourage continued work along the experimental line. Instead, such time as could be found has been devoted to a study of human blood in various disease conditions and, with this more favorable material, an attempt has been made to formulate some basis of judgment as to whether any definite changes can be detected.

The difficulty that at once arises in any such attempt lies in the discovery of an adequate standard of measurement. The ideal method would of course be that of an extraction of the reacting substance from the leucocytes in a known volume of blood and the exact determination of its value by a suitable reagent. Some attempts were made to approach the problem from this side, but these were entirely unsuccessful. Kastle and Amoss⁸ made a somewhat similar attempt some years ago but concluded that the variable peroxidase values shown by the

blood in different diseases were due merely to the variable hemoglobin content present. Since also, as stated above, the exact nature of the color reaction involved is entirely unknown, it seemed for the present more logical to treat the problem purely as one of morphological histology and to attempt a numerical estimation of the extent to which the leucocytes in a given case may have suffered changes in their morphological appearance. Occasional record of previous studies along this line has been encountered in the literature. Klopfer,⁹ using the original Winkler-Schultze oxidase method, studied the tissues from cases of poisoning with gas, hydrocyanic acid, phosphorus, etc., without finding evidence of any change from the normal cellular reactions in the parenchymal cells of fresh unfixed organs. Hatiegan⁷ also used the Winkler-Schultze method in studying the blood in various infectious conditions and concluded that no changes in the leucocytes could be made out. Fiessinger and Rudowska⁵ noted the variable granule content in the individual neutrophiles of blood smears stained by their benzidine method and divided these cells into two groups according to the relative abundance of their granules. They state the normal ratio of these groups as 6% of the + or deficient cells and 94% of the ++ or fully granulated forms. The latter vary from 84% to 94% in a series of nine diseases listed, these including pneumonia (94%); acute articular rheumatism (86%); rabies (85%); mitral regurgitation (84%); chronic nephritis (94%); acute meningitis (86%). A group of diseases with "diminished reactions" consists of typhoid fever (+26%, ++74%); pulmonary tuberculosis (+55%, ++45%); and purpura (+36%, ++64%). They believed that the granule constitutes a "pivot of reaction about which is concentrated a large part of the leucocytic metabolism" and concluded that the observed loss of granules in varying percentages of the neutrophiles in some of the diseases studied indicated a diminished oxidizing capacity on the part of the cells affected and therefore a valuable index of the general bodily condition.

For the present study the neutrophiles were arbitrarily divided into four types according to the abundance of their reacting granules. Type IV was taken as the normal. Here the granules

are abundant and heavily stained. They may be so closely crowded within the cell body as to mask the enclosing cytoplasm almost completely. More often, however, particularly in thin smears such as must be used for satisfactory study, the individual granules may be distinguished. They may be scattered uniformly through the cell or may show a beaded arrangement as short chains sometimes disposed radially in certain sectors of the cytoplasmic body. In the lower members of the group traces of clear cytoplasm may be seen about the nuclear membrane and between the rows or clumps of granules or even about the individual granules, but on the whole the granules impress one as being compact in their arrangement, rather uniform in size and appearance and arranged in a regular pattern that fills the cell body. Type III shows slight deficiency of the granules. The separation of the stained particles into five or six distinct groups or fields suggested in some of the lower Type IV cells has now become prominent so that the cell body presents distinct granule-filled sectors outlined by lanes of relatively clear cytoplasm. In the wider portions of the cytoplasmic body the fields may be clearly wedge shaped with centrally disposed apices but in the narrower portions of the cell along the convex surfaces of the nucleus they become flattened peripherally and lose the wedge shape. There is a distinct perinuclear halo and small irregular "bald" areas make their appearance particularly in the marginal cytoplasm normally occupied by one of the smaller granule fields. The granules may appear scattered and somewhat understained or may show a patchy variation in size and depth of color. Scattered heavily stained masses may appear that are noticeably larger than the usual forms and have a hazy outline. These hazy or smudgy bodies are perhaps the result of degenerative changes in the granular substance, their characteristic appearance being shared by an increasing percentage of the granules in the cells of the lower types to be described. In Type II there is undoubted loss of reacting granular material. The class has been considered as including cells varying at the top from those showing well marked axial core remnants of the fields typical of Type III down to forms in which only a few of the more central granules of these axes remain in place, the remnant

granules occurring as isolated groups whose location suggests the original field pattern. Again, all but one or at most two of the fields may have become unrecognizable or may be represented only by a vague, diffusely stained, apparently non-granular material. The one or two remaining fields may have a fairly abundant residue of the original granule quota. Type I shows only a few vaguely reacting granule shadows without any suggestion of definite pattern arrangement or the reacting substance may be represented only by a diffuse brownish haze in portions of the cytoplasm. The nuclei in the latter two types often stain faintly.

To summarize:

Type IV is a cell with a maximum granule quota. The pattern is regular and uniform.

Type III is a cell with such slight granule deficiency as may be found in fair percentage in the cells of normal blood. The granules may appear scattered and rather understained but usually show a well-marked field arrangement and sometimes irregularities in the size and staining of the individual particles. Small areas of cytoplasm may be distinctly bare of granules particularly in the marginal portion of the cell.

Type II shows undoubted granule loss. This may be general so that only a skeleton of the field pattern persists or it may affect individual fields unequally and one, or at most two, of the groups may be fairly well preserved while the remainder of the cell body is practically bare of reacting substance.

Type I shows complete or almost complete loss of granules.

Working on the basis of this tentative and very arbitrary grouping of neutrophilic types, a preliminary survey was made of the blood from a number of apparently healthy young adults, for the most part students. The cells were classified not only according to their granule content but also with respect to their nuclear configuration or "Arneth index" values. The latter grouping was included in this survey and also in some of the counts made later on pathological blood because it was thought that it might offer some check on the granule findings, at least until such time as it might be determined with some reasonableness whether, in the first place, any granule changes are to be

expected in mild or severe cases of toxemia, and, secondly, if such changes did appear, what their possible relation might be to another suggested factor of leucocytic variation.

TABLE 1. GRANULE AND ARNETH INDICES IN APPARENTLY HEALTHY YOUNG ADULTS

	GRANULE TYPES				ARNETH TYPES				
	IV	III	II	I	1	2	3	4	5
1.....	96	4	0.6	0	16	29	44	9	2
2.....	94	6	0	0	12	28	44	13	3
3.....	90	10	0	0	8	27	45	18	2
4.....	89	11	0	0	7	30	46	16	1
5.....	88	12	0.3	0	9	22	50	17	2
6.....	88	12	0	0	5	26	53	15	1
7.....	87	13	0	0	9	29	48	12	2
8.....	80	18	2	0	15	28	45	11	1
9.....	77	23	0	0	11	38	41	10	0
10.....	77	21	2	0	16	25	39	18	2
11.....	75	23	2	0	8	33	47	11	1

Table 1 presents the preliminary series of counts that were made on healthy individuals. The series is of course too small at present to allow any final conclusion to be drawn from the results obtained and it is, in any case, difficult to appraise the value of figures arrived at as these must be. They can be regarded at the best only as approximations and further experience may modify the impression gained from them. But in general it would appear that cells of Type I are not to be expected in normal blood and that those of Type II occur but rarely. There is rather wide variation in the proportionate numbers of Type IV and Type III cells. The significance of this is not clear. The impression has been gained that there may be some correspondence between the Type IV percentage and the robustness of the individual from whom the blood was obtained, the more vigorous and possibly more resistant subjects being most apt to show the higher Type IV averages. This, however, needs verification. There is some question whether the last three counts given in the table should be regarded as normal although the subjects from whom they were obtained complained of no illness.

Two other controls originally accepted as "healthy" showed counts of a parallel order. One of these, a vigorous young man with a granule count of 79-21-0-0, was found to be suffering an intestinal disturbance accompanied by slight malaise. The other, presenting a count of 73-25-2-0, was undergoing an exacerbation of a chronic sinusitis. It does not necessarily follow, of course, that moderately low counts are to be explained definitely as the result of slight infection for there may be other factors entering into the regulation of the individual granule count. Cooke³ thought it probable that the Arneth index may vary in different healthy subjects although maintaining a constant level for any given individual and the same may be true of the granule index. On the whole, it seems probable that a Type IV percentage of 80 or over with practical absence of Type I and Type II varieties may be taken as most likely to outline the range that is to be expected in normal blood. If we accept the first eight counts of Table 1 as meeting this tentative standard, the averages obtained are, for Type IV, 89%; for Type III, 11%. For the same specimens the averages for the Arneth types are, in order, 10.1-27.3-46.8-14-1.75. In counting the nuclear segments the attempt was made to follow the simple standard of judgment stated by Cooke and despite the very considerable differences in the individual counts of the present table the averages obtained are curiously like those obtained by him in the blood of eighty normal adults, viz., 10.9-25-46.7-15.3-2.1. Arneth's original figures were 5-35-41-17-2. The sum of the nuclear groups 1 and 2, which is the indicator value actually used in drawing conclusions from the count, becomes in the three results, respectively 37.4; 35.9; and 40.

Thin smears must be used in making the counts. This precaution is important for obvious reasons. In making the granule grouping only intact cells have been counted. A varying number of cells always found in the blood film show, under the usual stains, a more or less faintly outlined atypical nucleus and a shadowy cytoplasm. They have been considered by some writers as degenerated cells and by others as pure artefacts. With the benzidine method the granules of such cells are irregularly stained and more or less deficient and the whole appearance is distinctly that of degeneration. In view of the doubt as to their signifi-

cance, however, it was not deemed best in this preliminary work to include such forms definitely as neutrophiles of one or another type. Only those cells showing compact body and definite outline have been recorded in the counts. The so-called "large mononuclear" leucocyte appears to contain a few weakly reacting granules or a considerable number of them. It must not be confused with a neutrophile bearing a single nucleus. The differentiation is sometimes difficult and the cell becomes a stumbling block here as in other methods. The eosinophile is readily recognized from the large size, sharply globular outline and obvious refractivity of its granule. Owing to the water solubility of the gamma granule, the basophile or mast cell appears as an atypical polymorphonuclear cell with faintly stained cytoplasm showing no structural detail or only a vaguely suggested vacuolation.

TABLE 2. GRANULE AND ARNETH INDICES IN INFECTIOUS AND NON-INFECTIOUS TOXIC CONDITIONS.

	GRANULE TYPES				ARNETH TYPES					Remarks
	IV	III	II	I	1	2	3	4	5	
1. Tubercular peritonitis.....	30	60	10	0	18	43	31	7	1	
2. Tubercular osteomyelitis.....	34	55	11	0	25	46	20	9	0	
3. Typhoid fever....	4	14	57	25	47	37	14	2	0	Fourth week. Recovered.
4. Diphtheria.....	76	24	0	0	13	42	31	11	3	2nd day. W. B. C. 17,000. 12,000 units antitoxin given during previous 18 hours.
5. Acute alcoholism..	35	54	11	0	17	42	40	1	0	
6. Uncinariasis.....	44	48	8	0	2	17	38	39	4	
7. Trichinosis.....	2	24	56	18	32	47	14	7	0	Moribund. W.B.C. 5,000. Eosinophiles, 1%.
8. Trichinosis.....	20	56	24	0	22	45	29	4	0	Third week. Recovered. W.B.C. 12,000. Eosinophiles, 26%.
9. Trichinosis.....	19	42	37	2	53	33	13	1	0	Third week. Recovered. W.B.C. 20,000. Eosinophiles, 23%.

The counts given in Table 2 are in part from selected cases. That is, the primary question has been that of whether any granule changes can be made out in toxic conditions and, if made out, whether they can be recorded in such a way as to offer a standard of comparison for a particular case or a particular disease. While smears from all available toxic and many non-toxic cases have been examined, therefore, and rough judgment made as to whether or not any granule change could be made out, only those cases were selected for actual count which were most clear cut on the clinical side and which showed a neutrophilic change considered as of particular interest. Thus, the two cases of tubercular infection tabulated should naturally be accompanied by counts upon cases of pulmonary disease. As a matter of fact a small series of smears from cases under sanatorium treatment have very recently been obtained. No obvious changes were apparent in them on mere inspection excepting in two advanced cases with active lesions. None of these cases has been charted, the more careful study of these as well as other conditions being reserved for a later time when it is hoped that a more detailed report may be made. The single count recorded for typhoid fever shows a granule deficiency more marked than had been expected. The extreme degree of the calculated change is of interest in the light of the subsequent history of the case, which appears to have been that of an uneventful recovery. But one case of diphtheria has been encountered since the method of granule charting was adopted. The patient showed no evidences of toxemia when the blood was examined shortly after entrance into the hospital. It would be highly desirable to secure further counts on toxic cases in view of the granule changes described in this disease many years ago by Ewing⁴ and considered by him at that time as a valuable clinical sign of the patient's condition. The three cases of Trichinosis charted were seen in a hospital during a small epidemic of the disease. Cases 9 and 10 of the table were severely ill but eventually recovered. Case 8 died about twenty-four hours after the blood examination was made. Case 7 is introduced as an example of another parasitic disease. The patient was a young West Indian negro presenting

no clinical symptoms beyond the characteristic anemia and listlessness.

Acute lobar pneumonia has shown the most striking neutrophilic changes of any of the diseases studied. Here the variation in the morphology and staining reaction of nucleus and cytoplasm is apparent in the neutrophiles of preparations stained by the usual eosinate of methylene blue mixtures and even the granule changes may be appreciated. Thus on the basis of an exhaustive study of the disease conducted at the Rockefeller Institute, the statement is made¹ that "the appearance and staining qualities of the white blood cells often reflect the condition of the patient. . . . The nuclei of the (degenerated polymorphonuclear) cells appear fragmented, stain poorly, and the cytoplasm presents an appearance suggesting cloudy swelling. On the other hand, a day or two before crisis, . . . there may appear many polymorphonuclear cells . . . (whose) cytoplasm is packed with well staining coarse granules." The present series of cases is too limited to allow of anything more than tentative conclusions but in general the evidences of leucocytic disintegration reported are fully supported by the findings in benzidine-stained preparations. In cases doing badly there is a marked failure in the number of reacting granules and in the intensity of the color reaction in the surviving ones. This is probably the benzidine picture of the change suggesting "cloudy swelling" in the report quoted. The nuclei stain poorly and there is a decided "shift to the left" in the Arneth index.

Case 1 of Table 3 was one of the first in which the indices were calculated. The patient, an Italian laborer, was admitted to the hospital toward the end of the epidemic of last fall. He was suffering an acute attack of perfectly typical post-influenzal pneumonia. The blood smears, taken about twelve hours before death, show complete absence of Granule Type IV cells while 22 per cent were reckoned as of Type I. In the fatal Case 2, there is a decided drop in the granule values during the final forty-eight hours of an acute lobar pneumonia, the total leuco-

TABLE 3. GRANULE AND ARNETH INDICES IN PNEUMONIA AND ITS SEQUELAE

	GRANULE TYPES				ARNETH TYPES					Remarks
	IV	III	II	I	1	2	3	4	5	
1. Pneumonia, post-influenzal.....	0	27	51	22	36	40	16	8	0	Died same night.
2. Pneumonia, acute lobar.....	57	42	1	0	15	38	29	12	6	W. B. C. 24,800.
	17	47	32	4	30	28	32	9	1	Same case, two days later. W. B. C. 25,900. Died same night.
3. Pneumonia, double acute lobar. Protracted course..	15	53	31	1	20	45	28	7	0	Type IV and streptococcus.
	11	41	34	14	29	38	26	6	1	Same case. Four days later. W.B. C. 5,260.
	11	51	29	9	34	40	20	6	0	Eleventh day Temp. normal. Liquid diet, W. B. C. 5,600.
	51	46	3	0	29	33	28	10	0	Eighteenth day. W. B. C. 8,420.
4. Pneumonia, delayed resolution. Empyema.....	16	48	34	2	22	31	35	11	1	Boy, 14 years of age. W. B. C. 23,000.
5. Empyema, following post-influenzal pneumonia..	13	57	29	1	20	38	33	9	0	Slowly convalescent.
6. Pneumonia, acute lobar.....	78	22	0	0	32	40	24	4	0	Moribund.
7. Pneumonia, acute lobar.....	90	10	0	0	19	40	25	15	1	Moribund.

cytes meanwhile holding a constant level. Case 3 was that of a farmer, 35 years of age, who had been seriously ill for two weeks previous to his entrance into the hospital. He presented a double acute lobar pneumonia with marked prostration. The white count was persistently low. He was dangerously ill for about a week, after which the temperature fell by lysis, reaching normal at the time of the third count recorded in the table. Despite the marked clinical improvement evident at this time, the granule count seems not to have undergone any material alteration. Distinct return toward the normal is shown, however, in the

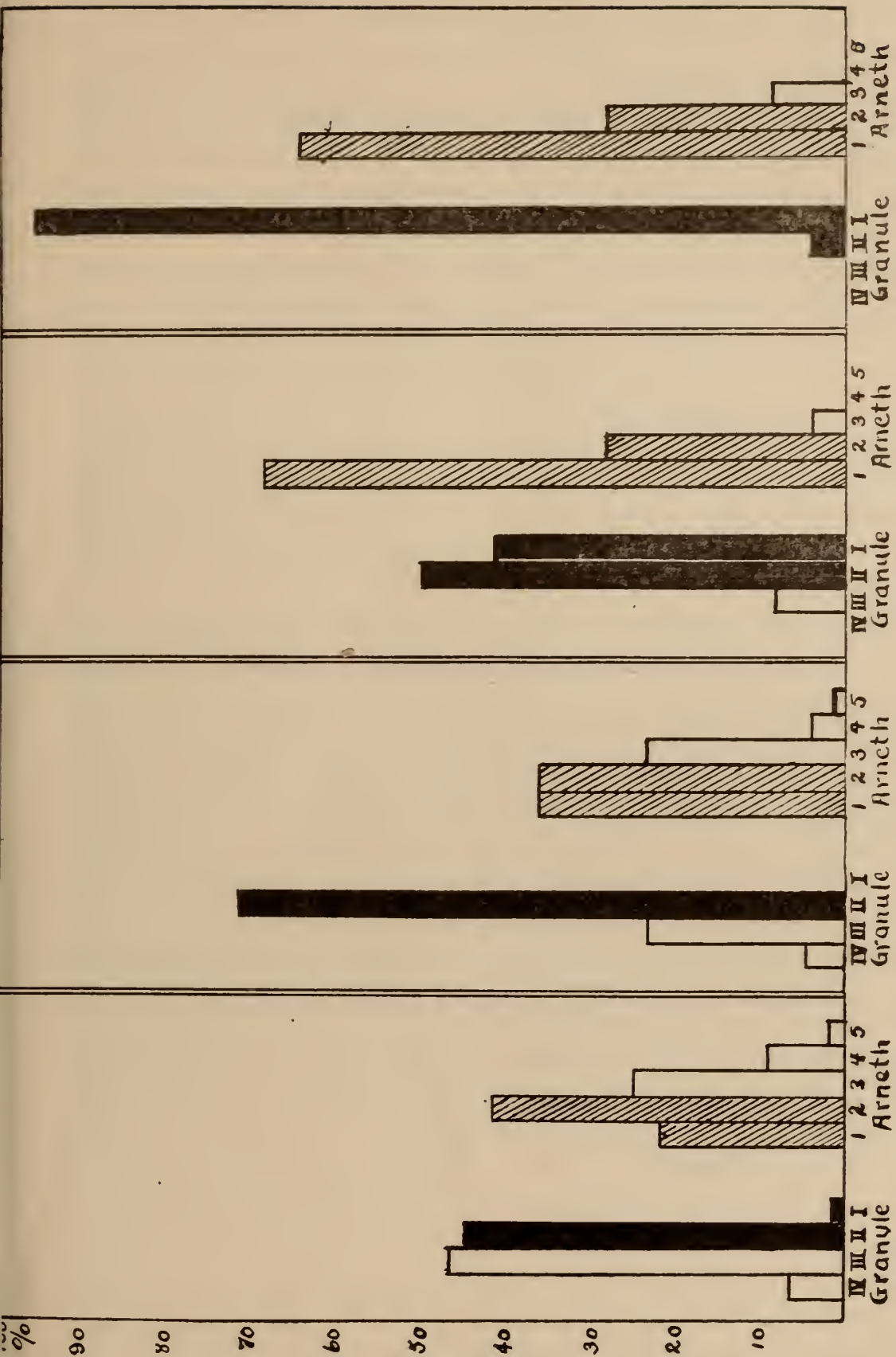


CHART — Granule and Arneth indices on successive days in a fatal case of acute lobar pneumonia (Type I).
No response to treatment with homologous serum.

count taken one week later. The findings indicate the great desirability of a close study of a series of cases with the object of determining whether the curve of variation in the granule index may be found to present any recognizable changes preceding those in the clinical symptoms or whether they merely accompany or follow the latter. In other words, the question arises whether the index may constitute a symptom having prognostic value. Cases 6 and 7 indicate that, for the present, conclusions may be drawn from the granule picture only with the greatest caution. Both patients were brought into the hospital moribund. The blood smears, obtained within one and two hours before death, show in both a surprisingly high granule count. It might be argued that these are to be considered as cardiac deaths occurring, in a sense, as accidents, in patients showing extremely active leucocytic response to the infection, but such an hypothesis could be supported only by extended observation.

The most remarkable case encountered in the present series showed neutrophilic changes represented graphically in Chart. The patient was a well developed man of 31 years of age. He was markedly toxic from the time of his entrance into the hospital on the first day of the disease. The white count on entrance was 14,400. On the succeeding days it fell to 8,000 and finally to 6,000. Pneumococcus, Type I, was recovered from the sputum. One hundred cubic centimeters of antipneumococcus serum was administered on the second day, and the same amount was administered once on the third day and twice on the fourth day, so that the patient received, in all, 400 cubic centimeters of the homologous serum. So far as could be determined clinically the treatment had not the slightest influence in combating the overwhelming toxemia and the patient died late on the fourth day. The granule failure in this case is extreme. The Type IV cells fell from the original count of 7 per cent on the first day to 5 per cent on the second and completely disappeared on the third day. The Type III cells showed an initial percentage of 47 that fell to 23 on the second day, 8 on the third day, and 0 on the fourth or final day. On the day of death there were 96 per cent of Type I cells and 4 per cent of Type II.

DISCUSSION.

Certain precautions are necessary in applying the benzidine method to the study of the neutrophilic granules. The blood smears used must be as fresh as possible, particularly when there is question of granule failure, since even the cells of normal blood may show perceptible decrease in the granular reaction within twenty-four hours after the films are made. This is particularly true if they have been exposed for any length of time to direct sunlight. It is possible that the blood of some individuals may show this change more quickly than that of others, and smears from cases of myelogenous leukemia several weeks old have been observed in which there was little if any decrease in the intensity of the reaction, but no conclusions can safely be drawn as to the granule reaction unless the smears are stained within a few hours at most after they have been made. For the satisfactory calculation of granule groups it is essential that thin smears be used. The compressed cells of a thickly crowded field show only a confused granule mass in which no details can be made out. Finally, the cells in the marginal areas of the smear must be disregarded. The loss of granular reaction is most rapid here and smears more than one or two hours old may show a normal staining of the cells in the main body of the surface while the neutrophiles in a peripheral zone one or two immersion fields in width may appear to be few or entirely absent. Particular care must be exercised also in the staining, first, as concerns the solutions employed and, secondly, in the time of exposure to them. When the benzidine method was first used occasional difficulty was encountered that appeared to depend upon some variation in the fixing solution, but this has been absent since neutralized formalin has been used in preparing it. A potent source of trouble lies in the use of an inactive hydrogen peroxide. This may be avoided by occasional titration of the reagent to assure its content of available oxygen. Old benzidine-peroxide solutions give a quicker and deeper color reaction than fresh ones so that fresh mixtures must be used as the basis for any comparative study of the granular reactivity. An alcoholic solution of benzidine containing no hydrogen peroxide remains constant for several weeks and it is possible to

utilize this fact by making up solution sufficient for one or two weeks' supply, simply adding the appropriate amount of peroxide to small portions as they are removed for use, but for the most part the preparations serving as a basis for the counts recorded above have been stained with a solution not over six to eight hours old. An equivalent precaution that is highly important lies in the adherence to a standard benzidine staining time of five minutes. This is sufficient to demonstrate all granules that may reasonably be considered as normal. It fails to show any but a vague reaction or presents none at all in the case of certain granules such as may be found in the cells of pathological blood and which have been considered as abnormal. But prolongation of the staining time to ten or fifteen minutes may apparently result in a positive reaction on the part of some, at least, of these forms and it results also in a loss of detail in the granule picture, as though there were some diffusion of the stain through the enveloping cytoplasm. The first change that takes place in the progress of what has been considered as granule failure appears, therefore, to result merely in a lessened activity on the part of the property responsible for the benzidine reaction, although there may finally be complete absence of any demonstrable reaction. In view of the several possibilities of error pointed out, constant control should be exercised through the simultaneous staining of smears of known normal blood along with those whose granule content is to be determined.

The possible relationship of granule changes to variations in the total white count and the polymorphonuclear percentage has been touched upon only incidentally in the cases thus far studied but it is planned to take up this question in the work now being continued. There has seemed to be a general correspondence in the figures obtained for the granule and for the Arneth indices, this consisting in an increase of the cells of the lower granule types coincidentally with increase in the younger Arneth forms. But while this correlation has provided a certain amount of confidence in the validity of the present hypothesis that granular failure may take place in toxic conditions, it is doubtful whether continued Arneth counting will justify the time that must be spent upon it. This is particularly true in view of the fact that the thionin-stained nuclei are not as satisfactory for the work

as those provided by the usual blood stains and considerable time and effort must be expended in determining the nuclear type of many of the cells encountered, especially in pathological blood. It is probable that the correlation of granule changes, total white count and polymorphonuclear percentage offers a more practical line of study.

In cases of extreme granular failure such as have been encountered in pneumonia it appears probable that the granular deficiency evident in the leucocytes of the circulating blood may extend back into the bone marrow, since in some cases smears of this tissue appear to react less vigorously than the normal. The myelocytes as well as such leucocytes as may be present share in the granule loss. The phenomena involved here may be concerned in the problem stated by Samuels and Lambert,¹¹ who found marked discrepancies between the state of hyperplasia or aplasia of the marrow and the leucocyte content of the circulating blood in acute lobar pneumonia. Longcope¹⁰ concluded upon the basis of experimental work on rabbits that the marrow cells become exhausted in fatal infections and it may be that a failure of the benzidine reaction may offer tangible evidence of such an exhaustion. But if the reaction should prove acceptable as such evidence, the condition of the marrow cells at death must be very different under different conditions since smears obtained from fatal infectious disease of various types may show a reaction on the part of the marrow cells fully as active as any found in non-infectious conditions. In fatal cases without myelocytic granule failure, therefore, and in the minor infectious conditions commonly encountered in which a variable deficiency may appear in the circulating leucocytes, it must be assumed that a cell emerging from the marrow with what may be considered as its normal granule content may subsequently undergo a more or less well-marked loss of the granular material. The conditions governing this loss have not been determined.

It may depend upon changes of a general nature in the blood as a whole as, for example, variations in the alkalinity, or it may indicate changes in the individual cell's functional activity or vital condition. The fundamental question underlying the whole problem is that as to the nature and significance of the granular substance and concerning this nothing is known.

In conclusion, the present study, while disregarding many fundamental questions that have suggested themselves, has concerned itself merely with the search for morphological variations in the leucocytes of the circulating blood as evident in their varying granule picture. The method available for the work suffers, in its present state of development, certain limitations and it may eventuate that these are serious enough to prevent the full acceptance of the indications derived from the limited amount of work here reported upon, but it is believed that, with due attention to the precautions noted, the method may serve to emphasize certain features not ordinarily considered in the study of the blood smear and that these features may prove to be of some interest if not of direct value in an immediate clinical sense. In another direction, the application of this or a corresponding method to the study of leucocytes engaged in phagocytosis either within the tissues or in the test tube might conceivably throw some light upon the mechanism involved in the leucocytic defense against toxic or bacterial agents.

CONCLUSIONS

The application of a benzidine staining method to blood smears suggests that the neutrophils of the circulating blood have a characteristic granule content that appears to vary in health only within relatively narrow limits. In acute infectious diseases, and possibly in some other toxic conditions, these granules may lose their reactivity toward benzidine to more or less marked degree. The study of these granule changes may prove of interest through its bearing upon the general question of the leucocytic defensive mechanism and possibly through its more immediate employment as a practical aid in the clinical study of disease processes.

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Correspondence

"THE EVIL THAT HAS BEEN SPOKEN OF
PHYSICIANS."*August 30, 1919.*

DEAR MONT.—Letters from France have brought me the expression of Dr. Callemant's gratification because of the publication, in the *ALBANY MEDICAL ANNALS*, of the translations of extracts of some of his own articles and from his friend's work on the Evil that has been spoken of Physicians.

Another installment having been sent to you, it is fair to assume that he will be pleased to read it, as "more of the same" sort.

Hoping that the other readers of your "esteemed periodical" may feel as kindly toward these extracts as does our French colleague, I am always,

Yours cordially,

CULVER.

CICERO. "I hear it said, as you have written to me yourself, that your physician, Aesculapius, is held in high esteem; I do not, however, approve of his methods; I have taken care to let him know my opinion, on this point (XVI, 9).

. . . "I have written to Curius to give you the money of which you have need. I believe that you would better give something, also, to your physician, to make him more careful. (XVI, 4).

. . . "When two citizens had a suit, Verrius used to give them, as judges, according to his caprice, some of his attendants, a soothsayer, a towncrier or his physician, Cornelius. . . . What sort of men were these? They were a hungry gang that loafed in the king's vicinity, or, rather, they were dogs, such as you see licking the tribunal." (Act II, XIII.)

Oppianicus' mother-in-law finding herself somewhat indisposed, Oppi brought his physician to her service. . . . The woman cried that she didn't want attention from the man who had brought about the loss of all her family. But the unfortunate patient could not escape. . . . Her son-in-law addressed himself to a peripatetic empiric named L. Clodius. In return for a sum of four hundred sesterces, this quack took charge of the case; "He was in a hurry, he had several visits to make; he was brought to the patient, he gave her a potion and she soon expired."

. . . "A little while later, the physician, Strato, at S——, committed a theft and a murder. He strangled two slaves who were acting as guard of a treasure; but the crime was discovered and the guilty one perished on the cross, after having had his tongue cut out."

Piso, governor of Macedonia, not having been able to extort a certain sum of money from a deputy named Plato, had him thrown into prison and sent his physician to cut the captive's veins. This murder was accomplished with the most atrocious barbarity; Cicero cries: "What butchers they are, to employ their physicians, not to cure, but to kill!"

PETRARCH (1304-1374).

(As a prefatory note to fifty pages of abuse of physicians, by Plutarch, Dr. Witkowski says that, after having read all the "amenities" of the famous Italian author, anyone will agree with the French editor that the former needed a deal of "gaul" to write, in the first book of his *Invectives*: "It will not be found that I have said anything against medicine or reputable physicians; on the contrary, I have spoken only in favor of Hippocrates, against his enemies who decry his doctrine.")

The joke of Angelo, Bishop of Arezzo, on the doctors.

I'm going to tell you of an adventure of our Angelo, late Bishop of Arezzo, who belonged to the Ricasoli family. He was suffering from a serious indisposition; physicians who were called admonished him to take their drugs, saying that, otherwise he would run great risk of dying. Having a natural horror of drugging, he refused, at first; at length, however, moved by the begging of his friends, he promised to act on the doctors' prescriptions. As is usually the case, they sent him potions, for several days; these he poured in the chamber-pot and hid it under the bed. The doctors came to see him again, to note the effect of their drugs. They found that the fever had entirely left him, ascribed the cure to the use of their soi-disant remedies and reproached him with not having taken their potions earlier, when they would have immediately and entirely restored him—they said! The Bishop answered that the drugs must indeed have had admirable power and virtue since it had sufficed merely to

put them under his bed, with the resultant recovery of his health. "What would they have done if I had drunk them?" he asked: "Surely they would have made me immortal."

The second volume of *Le Mal qu'on a dit des Médecins* begins with an extract from the Fabliaux of the 13th century; it is called a Hippocratic Lay. Dr. Witkowski's note upon the story is that it would be hard to show a greater disregard for chronology and history than is evinced in this tale; that it was to Antonius Musa that a statue was erected, by the Athenians, because of his having saved Augustus' life; but that he was later held responsible for the death of Marcellus, the emperor's nephew, and that his statue was immediately torn down, in consequence. Hippocrates had so much the less chance to be concerned with this, because of his having been dead more than four hundred years when it happened.

The author says that, before having acquired the celebrated reputation which has since immortalized him, having come to Rome during the reign of Augustus, he found the city in mourning for the emperor's nephew, who had just died; but that, having, at his own request, been brought to the palace, he poured into the corpse's mouth the juice of certain plants and thus brought the nephew back to life. The poet adds that Augustus, in recognition, caused two statues to be erected, of which one represented the nephew, the other the doctor; that he had them placed at the gate of the city, with an inscription which announced that Hippocrates, by his divine wisdom, had brought to life the quondam dead prince.

After Hippocrates had lived at Rome a few months, favored by the emperor, as he ought to have been, after rendering such a service and being almost adored by the people, as if he had been a god, a woman appeared on the scene and changed all this homage to laughter. She was a Gaul, of illustrious birth and rare beauty.

Augustus, who sought to treat her with distinction, had provided her with serving ladies and maids and, as a lodging, a house having a tower. As she wished to acquaint herself with the city's beauty and, with that purpose, went about it a great

deal, she came upon the statues in question and asked the occasion of their erection. This was explained to her ; but the inscription had hardly been read to her when, bursting into hearty laughter, she answered: "I wasn't aware that Rome had a god in it and I am surprised that, under the circumstances, anyone dies, any more. Well, if they'll turn their little divinity over to me, for just one day, I'll bet my head that I'll make him the most ridiculous of men." As usual, this challenge was promptly reported to Hippocrates, whose *amour-propre* and curiosity were, naturally, piqued and aroused by it. He wanted to know this woman, who so confidently announced the power of her beauty ; hence the chance to see her was sought by him. But it was his misfortune that he achieved that purpose, since she kept her promise only too thoroughly ; for she was indeed beautiful and, in conversation, displayed so much grace and sprightliness that, despite all the spirit of opposition with which he was forearmed, she pleased him so much that he couldn't help falling in love with her. He fell so hard that it made him sick. The emperor came to see him ; following this imperial example, ladies visited him, likewise and, finally, the stranger within the gates of that capital city, his lady-love, who readily and correctly diagnosed his case. She sought and found a time when she was his sole visitor, when she asked him, in a most friendly tone, about his case. He, only too happy at having a chance to do so, made no bones about owning up that he was dying of love for her. That was what she wanted ; Hence, affecting a tender interest in his illness and with seeming good faith, she said: "I should doubtless expose myself to much reproach and I should reproach myself much more if, being able to save a man of your merit I should be the cause of his demise. But even if I loved you as you love me, I leave it to yourself if it wouldn't be rather hard, under the circumstances, with so many eyes upon me as there are, to give you proofs of my affection. Be content, then, for the time being, with the expression of my regret and, with the assurance of my desire to prolong your life, receive the further assurance of my acceptance, in advance, of all means, of accomplishing that purpose, which your tenderness can furnish." So saying, she went out, as if blushing at the words she had just uttered. Hippocrates

derived from them hope and health, to the extent of being able soon to appear at the palace and resume his courtship of the beautiful Gaul.

"Well," she said to him, the first time that she saw him again: "Have you found any means of our becoming more nearly associated? What expedient have you discovered? Where are we at?" He answered that he had thought of the matter day and night, but that, up to that time, he had nothing to suggest. "You owe me gratitude, then" said she, "for, although I may not have exercised more ardor than you, in my quests, I have, at least, had more success. You know the tower in which I live; about the middle of the night be under its walls, with a basket that will hold you. For my part, with my cousin, whom I have succeeded in engaging on our side, I will let down to you, while my attendants are asleep, a rope to which you are to hitch your basket. When you have gotten into it, we will hoist you up and then, with no disturbance or fear, I hope to be able to give you proof of my affection."

Hippocrates was so blinded by his passion that this dull trap appeared to him the most adroit of stratagems. Thanking her profusely, he hurried away at once to buy the basket and was extravagantly impatient while awaiting the coming of the night. Finally, believing everybody asleep, he betook himself to the foot of the tower, with his basket and found—judge with what joy!—the rope already hanging out! He hitched the basket to it, and, getting into it, gave the signal to hoist away. And hoist away they did; but when he had reached a certain height, the dame made fast the cord to a hook; she left him hanging there and went away, wishing him quiet sleep and pleasant dreams.

Now, you know that, in those days, they had a peculiar custom in Rome, that for certain crimes, not punishable by death, the culprits were thus left hanging all day, from a tower, in a basket which, for that reason, was known as the convicts' basket.

When Hippocrates found himself thus trapped, he was in despair and cursed love and women a thousand times. There was nothing to do but pass the night in that place. Daylight only advertised his shame. In vain did he hide his face with his hands; everybody recognized him; a crowd gathered around and

all day long he was jeered and scoffed at by the populace. The guards about the tower, supposing that he was there by the emperor's orders, were careful not to rescue him from his predicament. That evening Augustus, returning from a hunt, and surprised to find someone in the basket without his orders, asked who it was. He was told that it was Hippocrates; he commanded that the doctor be lowered, at once, and announced, in anger, that he would avenge him thoroughly. But when he learned how it had come about that Hip had been fooled, he only laughed and, for a long time afterwards, all the barons had great fun with him about it.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

BUREAU OF VITAL STATISTICS.

DEATHS FOR MONTH OF AUGUST, 1919.

Consumption	12	Bright's Disease	14
Typhoid Fever	1	Apoplexy	6
Scarlet Fever	0	Cancer	12
Whooping Cough	1	Accidents and Violence.....	14
Measles	0	Deaths under 1 year.....	13
Diarrheal Diseases	8	Deaths over 70 years.....	26
Pneumonia	1	Death rate	12.99
Broncho Pneumona	2	Death rate less non-residents	10.64

Deaths in Institutions

	Non-res.	Res.		Non-res.	Res.
Albany Hospital	10	6	Public Places	1	1
Albany Hospital Camp..	1	5	St. Margaret's House ..	1	2
Albany County Hospital	0	2	St. Peter's Hospital.....	3	11
Homeopathic Hospital ..	0	2			
Home for the Aged....	2	2		23	38
Hospital for Incurables.	1	2	Births		180
Maternity Hospital	2	3	Still Births		6

DIVISION OF COMMUNICABLE DISEASES

Typhoid Fever	2	Tuberculosis	31
Scarlet Fever	4	Mumps	1
Diphtheria and Croup.....	7	Pneumonia	4
Chickenpox	4	Influenza	1
Smallpox	0	Cerebro Spinal Meningitis..	1
Measles	2		
German Measles*	0	Total	67
Whooping-cough	10		

Number of days quarantine for scarlet fever:

Longest..... 32 Shortest..... 30 Average..... 31

Number of days quarantine for diphtheria:

Longest..... 10 Shortest..... 10 Average..... 10

Fumigations:

Rooms..... 105 Buildings..... 18

Milk bottles disinfected..... 222

MISCELLANEOUS.

Cards posted for communi-		Vaccinations	102
cable disease	5	Vaccination dressings	76
Cards removed	6	Children examined for em-	
Notices served on schools...	0	ployment certificates	17
Notices served on stores and		Number of employment cer-	
factories	2	tificates issued	17
Postal card returns sent to		Taking specimens of blood	
doctors	13	for Wassermanns	13
Postal card returns received		Taking specimens for Gono-	
from doctors	5	cocci	12
Inspections and reinspec-			
tions	7		

Tuberculosis.

Living cases on record August 1, 1919..... 872

Cases reported:

By card 30

Dead cases by certificate..... 4 34

906

Dead cases previously reported..... 8

Dead cases not previously reported..... 4

Removed 1

Died out of town..... 0

Recovered 0

Unaccounted for 0 13

Living cases on record September 1, 1919.....	893
Total tuberculosis death certificates ..	12
Non-resident deaths: Albany Hospital camp.....	1
Resident deaths	11
Visits to cases of tuberculosis.....	34
Miscellaneous visits	0
Visits to physicians.....	7

LABORATORY REPORT.

Diphtheria.

Initial Positive	19	Release Negative	10
Initial Negative	256	Unsatisfactory	5
Release Positive	35		
			<hr/>
Total			325

Sputum for Tuberculosis.

Positive	38	Unsatisfactory	0
Negative	84		
			<hr/>
Total.....			122

Widals.

Positive	2	Unsatisfactory	1
Negative	26		
			<hr/>
Total			29

Meningococcus

Positive	0	Negative	0
			<hr/>
Total			0

Wassermann tests	239	Gonorrhea examinations	57
Milk Analyses	237	Miscellaneous examinations..	0
Water Analyses	0		
			<hr/>
Pathological Examinations .	0	Total examinations	1,009

DIVISION OF SANITATION.

Inspections	62	Reinspections	53
Plumbing	18	Plumbing	8
Sanitary	44	Sanitary	45

HEARINGS.

Hearings	5	Cases heard	5
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Class of Cases

Filthy yard	2	Manure	1
Filthy premises	1	Privy vault	1

Disposition of Cases

Reinspection	5
------------------------	---

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections	121	Houses tested	14
Old houses	64	Smoke	0
New houses	57	Blue or red	0
Permits issued	54	Peppermint	3
Plumbing	41	Water test	11
Building	13	Houses examined	30
Plans submitted	22	Re-examined	64
Old buildings	11	Valid	12
New buildings	11	Without cause	18

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	25	Cats removed	117
Dogs removed	37		
		Total	179

DIVISION OF MARKETS AND MILK.

Public market inspections	4	Milk cans inspected	0
Market inspections	28	Milk cans condemned	0
Fish market inspections	2	Lactometer readings	70
Fish peddler inspections	0	Temperature readings	70
Slaughter house inspections	0	Fat tests	0
Rendering establishment inspections	0	Sediment tests	22
Pork packing house inspections	0	Chemical tests	0
Hide house inspections	0	Cows examined	513
Milk depots inspected	16	Cows quarantined	0
Stores inspected	38	Cows removed	7
Dairies inspected	47	Complaints investigated	5
		Milk houses inspected	47

Medical News

ALBANY GUILD FOR PUBLIC HEALTH NURSING—REPORT FOR MONTH OF SEPTEMBER, 1919.—Number of new cases, (167) 307; classified as follows: Charity cases, 58; cases moderate income, 37; metropolitan, 72; prenatal, no charge for calls, 31; dispensary social service, 56; tuberculosis, 79; venereal disease, 5. Cases carried from last month, 277; total cases carried during month, 584. New cases classified according to disease: Medical, 42; surgical, 46; obstetrical (a) prenatal, 31; (b) confinement, 32; (c) maternity, 7; miscarriages, 3; no diagnosis, 6; total, 167. Disposition:

Removed to hospital, 7; died, 12; cured, 51; improved, 47; unimproved, 19; discharged to other care, 4; discharged to dispensary, 11. Number of patients still under care, 433. Cases reported by: Physicians, 48; metropolitan agents, 36; patients, family or friends, 35; nurses, 34; S. S. department, (56) 3; other sources, 1; dispensary, 10; total, 167.

Visits for nurses (all departments.)—(Number of other visits, 377;) number of visits with treatment, 1,036; number of social service visits, 394; number of prenatal visits, 87; number of tuberculosis visits, 145; number of supervision visits, 107; total number of visits, 2,146.

Dispensary report.—Number of clinics held, 65; number of new patients, 64; number of old patients, 373; total number of patients treated during month, 446.

Classification of clinics held.—Prenatal, 10; surgical, 13; nose and throat, 1; eye and ear, 18; skin and G. U., 4; medical, 8; tuberculosis, 4; venereal, 4; lung, see t. b.; dental, 0; neurological, 2; stomach, 0; pediatrics, 5; gynecological, 6.

Special tuberculosis department.—Number of tuberculosis patients sent to hospital, 2; number of tuberculosis patients returned from hospital, 2; number of tuberculosis patients died, 6; number of tuberculosis patients assisted with milk and eggs, 6.

Special venereal disease department.—New patients, 4; old, patients, 59; number of Wassermanns, 11; number of smears, 1; sounds passed, 0; Salvarsan treatments, 33; Binoide treatments, 11; Hg. Salicylate treatments, 10. Total treatments, 54.

Operations and treatments.—Parafine dressing to burned arm; hand sutured; abscess on buttocks incised and drained; abscess on head incised and drained; chalazion incised; abscess on wrist incised; ears irrigated; finger incised and drained.

F. R. FREEMAN,
Superintendent.

FRENCH CAMPAIGN AGAINST TUBERCULOSIS.—French methods to combat the spread of tuberculosis which had gained a strong foothold in the country were practically nullified by the war until the American Red Cross came to the aid of the people.

Through the agencies of the organization there is now a capacity for 1,983 bed patients in the tuberculosis hospitals in Paris and outside of Paris there are accommodations for 5,610.

The Bureau of Tuberculosis is working in close conjunction with the Rockefeller Commission for the Prevention of Tuberculosis in France. The total number of beds assisted by the Red Cross Bureau of Tuberculosis amounted to 24,185. They were aided to the extent of 3,287,417 francs and relief was supplied to the extent of 794,447 francs.

An appropriation for a Serbian hospital in Paris has been made because it was found, after examination, that twenty per cent of the 200,000 Serbs studying in the country were tubercular.

TENTS AS HOSPITALS.—Tents as hospitals was a wartime emergency in France which resulted very favorably. Because of the scarcity of wood, tents were established as hospitals by the Forty-second and Seventy-seventh Divisions, each using nine tents. At the Steeple Chase grounds at Autueil, the American Red Cross placed thirty-nine tents as wards. They had wooden frames and floors and were ventilated by means of eighteen windows. It required six or seven hours with a crew of five or six men to erect such a hospital. When the armistice was signed, the Red Cross was preparing to establish a tent hospital consisting of one hundred and eleven tents.

TYPHUS RAGING IN EUROPE.—An epidemic of typhus is raging in Europe and the Red Cross is taking an active part in the effort to stamp out the disease.

Henry P. Davidson reports that 275,000 cases have been found in the belt extending from the Baltic to the Black sea and there is appalling distress in Poland, Lithuania and the Balkans.

The Red Cross has sent 200 representatives to Poland in response to a pathetic appeal from Paderewski. Edicts calculated to stop the spread of the disease have been published in that country, one of them being an order that every person shave and bathe. About 100,000 cases have been reported and the death rate is high.

At the conference held in Cannes, recommendations were made to enlist Red Cross Societies to establish a permanent committee of medical experts of the allied countries to deal with the typhus problem.

NURSING SCHOOLS OPENED IN BUFFALO.—A post-graduate course for public health nurses is to be given in Buffalo for sixteen weeks beginning September 29th, under the auspices of the Buffalo University, the Buffalo Chapter of the American Red Cross, the Department of Health, the District Nursing Association, and the Department of Hospitals and Dispensaries.

An excellent teaching staff has been secured. A certificate will be given to all students satisfactorily completing the course, which will cost \$25.00. The class will be limited to thirty, and applicants must be registered in New York State or states having equivalent standards. Application blanks will be supplied by the University of Buffalo, College of Arts and Sciences, Niagara Square, Buffalo, New York.

MARRIED.—Dr. BYRON G. SHULTS (A. M. C. '15) and Miss FRANCES BENNETT were married at Chillicothe, O., August 31, 1919. Dr. Shults had served in the Army Medical Corps, with rank as captain, and had received his honorable discharge two weeks before the marriage. Dr. and Mrs. Shults will live in Johnstown, N. Y.

PERSONAL.—Dr. ELMER HARRISON ORMSBY (A. M. C. '13) has been honorably discharged from Medical service, and has resumed his practice of medicine and surgery at 33 Church Street, Amsterdam, N. Y.

NEW YORK STATE MEDICAL LIBRARY.

Edited by Frances K. Ray

RECENT ACCESSIONS.

- Bell, A. G. Mechanism of speech. 8th ed. 1916.
 Bernheim, Maj. B. M. "Passed as censored." 1919.
 Binnie, J. F. Treatise on regional surgery. 3 v. 1917.
 Bluemel, C. S. Stammering and cognate defects of speech. 2 v. 1913.
 Catlin, L. C. Hospital as a social agent in the community. 1918.
 Chapman, Mrs. Wood-Allen. How shall I tell my child? 1912.
 Cooke, J. B. Nurse's handbook of obstetrics; revised by C. E. Gray
 & M. A. Baker. 8th ed. 1917.
 Hall, W. S. Life's beginnings. 1916.
 Hawk, P. B. What we eat and what happens to it. 1919.
 Hough, Theodore & Sedgwick, W. T. Human mechanism. Rev. ed. 1918.
 Hughes, Basil & Banks, H. S. War surgery from firing line to base.
 1918.
 Hyatt, T. P. Teeth and their care. 1906.
 Kimber, D. C. Textbook of anatomy for nurses. 5th ed. 1918.
 MacCallum, W. G. Pathology of the pneumonia in the U. S. army camps
 during winter of 1917-1918. 1919. (Rockefeller inst. for med. re-
 search. Monograph no. 10.)
 Nias, J. B. Dr. John Radcliffe; a sketch of his life, with an account of
 his fellows and foundations. 1918.
 Ontario medical association. Canadian medical week. 1918.
 Overton, Frank & Denno, W. J. The health officer. 1919.
 Rockefeller institute for medical research. Studies. v. 31, 1919.
 Sajous, C. E. de. M. Internal secretions and the principles of medicine.
 2 v. 8th ed. 1919.
 Scott, T. B. The road to a healthy old age. 1919.
 Thoma, K. H. Oral abscesses. 1916.
 Thoma, K. H. Oral roentgenology. 1917.
 U. S. Surgeon General's office. Manual of neuro-surgery. 1919.
 Wall, O. A. Sex and sex worship. 1919.
 Yutzy, S. M. Manual and atlas of dissection. 1906.

NEW PERIODICALS

- Archiv der pharmazie.
 Better eyesight.
 U. S. Bureau of medicine and surgery. Notes on preventive medicine for
 medical officers of the U. S. navy.

ALBANY MEDICAL ANNALS

Original Communications

THE COUNTY MEDICAL SOCIETY, A STUDY.

*The President's Address to the Medical Society of the County of Albany,
May 13, 1919.*

By CHARLES H. MOORE, M. D.,

*Instructor in Ophthalmology and Otology, Albany Medical College; Assistant Attending
Ophthalmologist, Albany Hospital; Ophthalmic and Aural Surgeon, Child's Hospital.*

"An act to incorporate Medical Societies for the purpose of regulating the practice of physic and surgery in this state:" so reads the title.

Then follows the preamble: "*Whereas*, well regulated Medical Societies have been found to contribute to the diffusion of true science and particularly the knowledge of the healing art: *Therefore*, be it enacted, etc." So begins the bill to incorporate medical societies in the State of New York, that passed the Assembly March 28, 1806; the State Senate, April 2, 1806, and received the signature of Governor Morgan Lewis on April 4, 1806. Tuesday, July 1st, was the date set for organization but the requisite number, five, were not present on that day and adjournment was made until Tuesday, July 29, 1806, when ten physicians met at the City Hall in the City of Albany and conformably to the act to incorporate medical societies, convened and proceeded to form themselves into such a society.

Five were from the City of Albany, two from the town of Bethlehem, and three from the City of Schenectady, at that time and until 1909 in Albany County. It will be interesting to note briefly the characteristics of these ten pioneers in a new venture. The chairman of the meeting, Wilhelmus Mancius, was nearly seventy years of age. Somewhat eccentric, but of a social, genial

nature, he had by careful observation obtained considerable skill and stood an oracle not to be disputed on medical topics. His associate in practice Hunloke Woodruff, some seventeen years younger, was chosen president of the infant society. He was a graduate of Princeton College, had studied medicine in New York City and had served with honor as surgeon in the Revolutionary Army under Colonel Peter Gansevoort of Albany. The one elected as vice-president, William McClelland, was still younger and with a medical education received in Edinburgh, Scotland, had many advantages over his associates, and it is not surprising that he was elected representative to the meeting to form the New York State Medical Society and enjoyed the high honor of becoming its first president in February, 1807.

The Secretary, Charles DeKay Townsend, had attended medical lectures at Columbia College, was a young man twenty-eight years of age and for many years thereafter exemplified in his life the highest that there is in the practice of medicine, rendering alike service to the poor and the rich.

John G. Knauff was elected treasurer; he was born in Germany, of sound education, an apothecary as well as physician, but being of a retiring and unsocial disposition, he made few friends.

Joseph W. Hegeman is spoken of as being the son of wealthy parents, licensed to practice by Princeton College, was from Schenectady, where he was esteemed a good practitioner, gentlemanly and courteous in manner. Cornelius Vrooman, likewise from Schenectady, twenty-five years old, six feet in height, quick tempered but popular, kind hearted and generous, was educated at Union College and had attended medical lectures at the University of Pennsylvania. From a country village in the town of Bethlehem, south of Albany, came Caleb Gauff, a typical family physician, past the meridian of life, of whom little is known, save that he was a respectable practitioner.

Augustus Harris, some thirty years of age, followed in the footsteps of his father as physician among country folk for many years, lived to see the society he helped form pass the half century mark. And the youngest amongst those who gathered on that July day was Alexander Glen Fonda, a graduate of Union College, who had studied medicine under the direction of one of

Schenectady's foremost physicians, his license to practice but two months old and lacking three weeks of attaining his majority, lived to be present at the Semi-Centennial meeting of this society.

Rarely has any organization been formed that better expressed in the character and aspirations of its charter members what it stood for than did the society of which you and I have the honor to be members. It is not my purpose to give a strictly historical review of the events that have marked the progress of the Medical Society of the County of Albany since its inception one hundred and thirteen years ago, but to touch here and there upon some points in its life history that tell of its advance toward the realization of an ideal. It is not my purpose to weary you with many statistics, nor is it my intention to speak at much length of those, who either in positions of prominence, or in the rank and file, worked for the honor and welfare of this Society. Dates will have to be given, in order that one appreciate more fully the conditions that surrounded the events I will briefly speak of. It is an interesting study, the life of an organization, and one of the first things we note is the fact that many of the troubles with which we contend at this day are of the same nature as the troubles that confronted those of a century and more ago.

We speak of one generation following another and our minds conceive of a generation as comprising thirty years, so let us study our subject in terms of that nature. Our first generation therefore begins with 1806 and ends with 1836. It was a period of growth, of adaptation to formal rules and by-laws, of putting into action unaccustomed efforts. What was the first purpose of the Society? It was to differentiate between the charlatan and the qualified physician, to raise the standard of medicine by the power given it by law to examine and license those who desired to practice medicine. Jealous indeed was our Society of any infringement upon this privilege and duty.

Four stated meetings were to be held each year and a Medical Dissertation was to be handed in at every quarterly meeting by one of the members, chosen in alphabetical order. There was an admission fee of three dollars when elected, and a stated fee of fifty cents to be paid at each quarterly meeting. This last, with the fees paid by candidates for examination, which was the

sum of two dollars, went to the funds of the Society to be used for the establishment of a medical and philosophical library and apparatus.

Hardly two years had passed before we notice that the treasurer began to have trouble in collecting the quarterly payments and an article was added to the by-laws that allowed him to prosecute annually for the same. At this time we also find our Society alive to the truth that something more is needed to bring men together than infrequent meetings mostly given over to business, and in addition to the four stated meetings required by law, a meeting was to be held every intervening month for the purpose of promoting social intercourse and harmony, which all respectable physicians in the county were requested to attend.

We find an interesting little item in the records of these early days that shows that paying for books on the instalment plan was not unknown, for in 1810 the Society agreed to purchase a set of books, "Medical and Physical Journal," in twenty-one octavo volumes, valued at one hundred and five dollars. Of course there was an extra assessment on each member to meet this obligation. Hardly eighteen months elapsed when an obliging member paid the balance due, took the set off their hands and stopped this drain on the slender resources of the Society.

Filled with a growing sense of its powers and importance the County Society in the fall of 1813 decided that the State Medical Society was in its opinion injurious to the promotion of medical knowledge and practically asked for its abolition. A change of heart soon came, for within three months a delegate was elected to the Medical Society of the State of New York, but there had been a feeling of unrest and bitterness engendered, for all the stated meetings were passed for the next two years, no quorum appearing at any of them.

Changes were made from time to time during this decade in the laws relating to the practice of medicine. Time will not permit my stating the nature of these changes, suffice it to say that then as now, our Society through its committees kept close watch upon all pending legislation. Having its location in the Capital City of the State it had many opportunities to be of service in that respect. Slandorous remarks from foes, sometimes called

forth the retort courteous, as did an article appearing in the *New York Evening Post*, in which was this sentence, "In one County Medical Society it was seriously debated whether the money thus raised by the dollar tax should not be appropriated to the purchase of liquor." It was generally understood that the Society at Albany was referred to and at a special meeting held March 18, 1822, were passed resolutions characterizing the statement as "false and malicious, totally destitute of the shadow of truth, and disgraceful to the authors and the propagators of it."

In 1824 an epidemic of small pox occurred in our city and a communication was received from the mayor asking advice. This Society thereupon passed a resolution expressing full confidence in vaccination and recommending it as the only reasonable measure of checking the disease.

In 1826 a patented device for the application of warmth and moisture externally, known as the Albany Medicated Vapor Bath came into existence. The Society looked upon it as a species of quackery and contrary to the code of medical ethics of the State Society, and through a committee carefully considered the subject and decided that Dr. Jonathan Eights, William Bay, and John W. Bay, who had become interested in and were making use of this vapor bath, were not acting in accord with medical ethics in their judgment, but referred the matter to the State Society for their consideration and final decision. I find no further reference to the subject in either county or state record.

In 1827 the law of the State read that one to be legally entitled to practice medicine must not only be licensed but be a member of a County Medical Society as well. Many interesting papers no doubt were read in the twenty years that had passed since organization, but except a few transmitted to the State Society or published in some contemporaneous medical journal, these are lost to us, for the minutes of the meetings report they were deposited in the archives—that mausoleum from which nothing returns.

January 11, 1831, was a strenuous day. It was the annual meeting. Dr. Charles D. Townsend had been re-elected President and Dr. Barent P. Staats, Vice President. The attendance was large, confusion prevailed, a dissatisfied minority after the

regular meeting elected a separate set of officers; the ex-Secretary and Librarian retained the records, papers and library of the Society and refused to deliver up the same. Competent legal advice was sought in the person of Benjamin F. Butler, Esq., one of the most prominent lawyers of Albany at that time, associated in practice with Martin Van Buren, and after an opinion had been obtained from Chief Justice Savage, the records and books were returned. More important matters were soon to engage the attention of our members. Cholera gained a foothold in our State and again came an appeal from the city authorities to the physicians. Immediately a medical staff, under leadership of Dr. Eights, Chairman, was created, the other members being Drs. Wing, Greene, Bay, Townsend, Wendell, James, McNaughton, and March. All members of the Society, however, worked faithfully to stamp out this plague, during those days and weeks of anxiety when 422 deaths occurred among 1,147 cases of Asiatic Cholera that were reported. Possibly this experience was responsible for the passing of this resolution at the anniversary meeting of January, 1833: "It is the sense of the Society that the time had arrived when a public health officer is required in this city, and that the Society recommend the subject to the attention of the city authorities." The meetings at this time were well attended, the Society was doing good work, proceeding as best it could against illegal practitioners, carrying the matter into the courts and obtaining gratifying results. Most of the meetings were held in the City Hall in 1831; prior to that time they had been held in the State Capitol and, in the very early days of its existence, in the old City Hall. At many of the meetings the roll was called and the names of the absentees as well as those present were recorded. Those absent were fined, but this method of securing attendance was unpopular and on more than one occasion it was necessary to remit fines to avoid unpleasantness. As the end of the first generation approaches there is a slump in interest and several meetings pass in succession, no quorum being present.

The study of our second generation, that from 1836 to 1866, is an interesting one, and although for a time interest seemed lost, a faithful few proved loyal and soon results followed. So

far in the history of the Society, members were notified of regular meetings by publication in newspapers, but in 1840 personal printed notices were directed to be sent. Even then attendance was small at the annual and semi-annual meetings, the only two meetings that the Revised By-laws (adopted in January, 1840) required: an annual meeting in November, a semi-annual in June. Five members constituted a quorum, except at the annual meeting, when nine were required. Since 1838 it had been customary for the President to read an address at the annual meeting, but on November 9, 1841, when Dr. Jonathan Eights called the annual meeting together, at 12 o'clock noon, an hour after the appointed time, only five members were present. An adjournment to meet a week later brought six together, the paper was read and discussed and adjournment for another week, when nine being present, officers for the ensuing year were elected. A resolution adopted at that meeting called upon practitioners in Albany County to unite with the County Society within thirty days or their names would be published with the list of illegal practitioners. At the next annual meeting, called for November 8, 1842, the Secretary reports:

“Visited the City Hall for the purpose of meeting the Albany County Medical Society and found no one in attendance except the President, Dr. Peter Van Buren. H. Greene, Secretary.”

No meeting was held till November 13, 1843. At this meeting a motion was adopted that a list of all the members should be published in the Albany City newspapers stating that the said members were the only persons who had the power to collect by law a compensation for medical services. This seems to have been the law since 1806 although those who only used barks, roots and herbs grown in the United States were exempt from its provisions.

Radical changes were to be made in the medical laws, for all restrictions were to be removed from the right of any one to collect for medical services rendered, although liable to civil and criminal prosecutions, for mal-practice, gross ignorance or immoral conduct.

While not approving of all the provisions of this act of May 6, 1844, and objecting to the last, the Society chose to abide by the

report of its committee, Dr. Thomas Hun, Chairman; Dr. Joel A. Wing and Dr. Mason F. Cogswell. The report from which I will quote later was accepted and the following resolution adopted: "*Resolved*, That in the opinion of the Society it would not be conducive to the interest or respectability of the medical profession, at the present time, to apply to the legislature for any alterations in the charters of the State or County Medical Societies, or any legislation on medical subjects whatever."

Some sentences of that committee's report are worth repeating now. I ask your serious consideration of them: "The dignity and respectability of our profession is to be promoted, not by asking for legal privileges but by an increase of individual zeal and a more cordial cooperation. The barrier which effectually separates the physician from the quack is formed by the higher attainments and honorable deportment of the former and this is the barrier which it depends on us to make higher and stronger. It is one which quackery will not surmount and which no legislative enactment can break down." Dr. Thomas Hun was chosen President at the next annual meeting and during his administration every effort was put forth to revive interest, old members who had lapsed were urged to return to the fold and new members were sought for, circular letters being sent to all regularly licensed physicians in the country. In spite of all this effort in February, 1846, a pessimistic feeling prevailed. In the minds of some the County Society had failed of its high mission, distrust and lack of good feeling had grown up, members had remained isolated and scarcely knew each other. What must be done? Does not this Jeremiad sound familiar? Though often discouraged the faithful few struggled on. The attendance might be small but they were representatives of the best in the profession as were the ten who had met to form the Society. Several problems were met with and considered, among them: how to protect the physician from the imposition of the non-paying patient; a better and reciprocal understanding between the physician and the apothecary, and the presentation of a memorial to the common council looking to the establishment of a medical dispensary. The last was at a meeting held January 5, 1847, and the committee appointed to present this memorial consisted of

Drs. Thomas Hun, Joel A. Wing and Alden March. The last named had been an active member of the Society since January 14, 1823, and through his efforts and by his energy the Albany Medical College had been in existence since January, 1839. With such a committee it was not long before the Albany City Hospital became a reality and in 1849 it opened its doors for the relief of suffering humanity.

It had been the custom thus far to hold the stated meetings in the morning, but it was thought wise to change the hour to three in the afternoon. Once more the question of a reading room was revived and more earnest care was bespoken for the library. A public spirited citizen engaged in business as a bookseller, Mr. E. H. Pease, offered a room for such purpose. His offer was accepted and for two or three years in the early fifties much use was made of his hospitality. March 23, 1853, we note a new departure from the customary order of things. A uniform fee list seemed desirable in the opinion of our members, although such an innovation had been formerly looked upon with disfavor by both State and County Societies. A committee of three, consisting of Drs. Barent P. Staats, S. Oakley Vander Poel and J. B. Rossman, were appointed such committee and in June reported a fee list to apply only to the City of Albany. The prices ranged from twenty-five cents for "every powder or dose of pills" to fifty dollars for some cases of "instrumental labor" or for cases of "lues venerea" but if any individual practitioners considered their services not equal to the prices specified they could charge a less sum for their compensation.

It was the custom about this time to invite students of the Medical College and often the regular order of business was changed in order that the medical class might listen to an address and not be detained beyond the hour of the next class meeting. In December, 1853, three delegates were elected to the State Medical Society, according to Act of Legislature of June 4, 1853, instead of the one delegate formerly allowed. Times were changing, many physicians were possessors of medical libraries as well as subscribers to periodicals of that nature and in November, 1855, this resolution was passed: "That the Society present the Library and all its appurtenances to the Albany Medical College."

Six months later the College, through its Registrar, acknowledged the gift.

On December 9, 1856, the Society, realizing that while under the law its members could be called upon to give testimony in criminal cases, to make post-mortems and to examine where insanity was suspected, still the remuneration was ridiculously out of proportion to the services rendered, presented a fee bill, which the State Medical Society recommended as a model for other County Societies to follow.

A month prior to this date, the Society's Semi-Centennial Anniversary was held on the eleventh day of November, on the date fixed for the annual meeting. The business meeting was held in the Common Council Chamber in the City Hall while the banquet took place in the evening at Congress Hall. The Semi-Centennial address was delivered by Dr. Sylvester D. Willard, at that time Secretary of the Society, and I would recommend you all to read his resumé of the fifty years that had passed. At the next annual meeting evidences of a closer participation in civic affairs is noted by the adoption of a resolution, offered by Dr. J. H. Armsby, recommending the enactment of a law regarding uniform registration of birth, marriages and deaths as being of the highest importance not only to the medical profession but to the interests of society generally.

The next year an epidemic of diphtheria prevailed throughout the county and its discussion occupied the minds and tinged the expressions of those who participated in the work of the meetings. Smoothly matters moved along, the attendance was excellent and harmony prevailed, when once more discord arose. An election had been held, a delegate to the State Medical Society had been elected and it was alleged in the public prints and otherwise, that the number of ballots cast and counted was greater than the whole number of members present and voting. Such aspersions upon the honor and dignity of our Society called for prompt action. The committee appointed to investigate, consisting of Drs. Thomas Hun, Cogswell and Quackenbush, could not trace the fraud to any person or persons, but stated that the so-called spurious ballots would not have changed the result. A resolution was adopted at the semi-annual meeting of 1859, which suggested

that greater interest would result if committees were appointed for the investigation and special consideration of medical subjects, reporting at each regular meeting of the Society. At the annual meeting that year, the President, Dr. S. D. Willard, appointed eighteen such committees, consisting of from one to three members each. I will only mention a few of them. "Management of the Albany County Asylum for the Insane;" "Comparative Value of Medical Anaesthetic Agents and Mode of Death from their Uses;" "The Use of the Silver Suture;" "To Secure Mortuary Statistics in the City of Albany;" "Public Hygiene;" "Surgery" and "Medical Journalism."

An effort was made to have meetings again at monthly intervals and though the attendance was not large, except at the annual or semi-annual meeting, much of interest and encouragement is found in the records of the next two years. At the annual meeting in November, 1860, a resolution was passed that hereafter the Society would not admit any physician as a member who dealt in patent or quack medicines. I have wondered whether the introducer of this resolution was antagonistic to two physicians, both respectable druggists who had very recently joined the Society.

In February, 1862, we meet a resolution that sounds familiar, in part as follows: "A committee of three to be appointed to take measures and attend to the procuring of suitable refreshments, to be furnished to the Society at their monthly meetings." The civil war was now in progress and its effect is shown in the character of the papers read and the discussions that followed. It is interesting to note that by those who were appointed for the examinations of persons claiming exemption from military duty under the draft law, hernia was found to be the cause in ten per cent of those examined. Discussion was frequently had relative to the care of the sick and wounded in our army and navy and many of our members did yeoman service in correcting abuse and alleviating distress. Time and space will not permit the mention of the names of those who went to the front from our membership in those days of peril to our nation. Two names come to my mind of those who won honor and distinction in those early days of the war: Dr. Sylvester D. Willard and Dr.

John Swinburne, the latter also achieving fame for his surgical work in the Franco-German war years later.

In October, 1864, the Society met to greet Dr. Wm. T. G. Morton, who gave an account of his discovery and early experiments with ether. Public meetings were held and a substantial sum of money was raised for the Morton Fund that had been established for the purpose of expressing the appreciation of his fellow countrymen for the boon he had conferred upon humanity in proving the value of ether as an anaesthetic agent. At the annual meeting that year reports were called for from the eighteen special committees for medical investigations appointed in 1859; only three had any report whatever to make. Vacancies were filled and the committees continued. The propriety of practitioners advertising their specialties was also discussed at this meeting. It was decided that an advertisement indicating locality and residence was the utmost limit of self-announcement consistent with professional dignity; all references to special branches should be deemed violations of the Code of Medical Ethics. However in our County Medical Society, specialties seemed to be recognized, for at the semi-annual meeting, held in June, 1865, among the special committees appointed was one on Diseases of the Eye and Ear, Dr. Charles A. Robertson, Chairman; and in December of that year, cases of Ear Diseases were reported and a few months later a paper entitled "The Present State of Ophthalmology," was read.

My father, Dr. Levi Moore, was elected President of the Society at the annual meeting held on November 14, 1865, and it was during his administration that two of our members, still active among us, were admitted. On November 14, 1865, Dr. Joseph Lewi proposed the name of Dr. Herman Bendell and on June 12, 1866, Dr. William H. Bailey proposed the name of Dr. Albert Vander Veer. Both of these names were voted upon at the annual meeting, held November 13, 1866, and they became members on that date. They have the honor of having faithfully served the Society for the longest period of time of any member now living.

A question was raised in one of the meetings held in 1866, "Whether a physician who kept a drug store, and sold patent

medicines, could, according to the rules, be admitted to membership in the County Society." Remarks were made, and no action was taken. Several of our members at that time were druggists as well as physicians.

Another fee list was submitted in June, 1866, by Dr. Alden March, Chairman of the committee, and the increase in fees above that of the list of 1853 showed the effect of the high cost of living owing to post-war conditions. It closes however with this sentence: "In every case, in settling this account, the practitioner may make any deduction which he conscientiously believes the circumstances of the patient render necessary." The President's address in November, 1866, was "Sanitary Science and Its Relations to Public Health," an appropriate subject at that time, for our country had again been threatened with an invasion of cholera which twice before, in 1832 and again in 1834, had been epidemic in Albany. This time we escaped.

Our next generation, from 1866 to 1896, shows continued growth in usefulness and power and our study of its efforts reveals the effect of the greater diffusion of medical knowledge, of discoveries made, and of an awakened public interest in matters pertaining to public health. On June 20, 1867, the Albany County Medical Society gave a dinner at the Delavan House to Drs. James Wade, Barent P. Staats and James McNaughton, who had each completed a half century in the practice of medicine. At that dinner, in responding to the toast, "The Albany County Medical Society," Dr. S. O. Vander Poel spoke these words to which I invite your attention: "There is a point in which the principle of associations is peculiarly applicable to the medical man. His professional life is one of isolation, while in the world moving among men, he is still not of the world so far as ordinary business transactions and relations are concerned. Unlike the legal profession he is seldom thrown into direct personal relation with his professional compeers. He has therefore but little opportunity except through his Society of estimating them correctly either as men or physicians."

Albany at this time had a population of some 70,000, ten times the number of inhabitants that it possessed in 1806 when the Society was founded. September 22, 1868, showed a close rela-

tion between the Medical Society and the Albany Hospital, when by invitation of the Board of Governors of that institution, then situated at the corner of Eagle and Howard streets, the Society met in a room fitted up especially for them. For two years, twice each month, from September first to June first, meetings were held at eight o'clock in the evening and it was customary to have a recess during which refreshments were served.

The meeting, apart from such business as it was necessary to transact, was devoted to the discussion of live medical topics and the presentation of cases and interesting anatomical specimens. The Secretary during that period, Dr. Charles H. Porter, was a master of detail and has given us in his minutes a realistic pen picture of those meetings, making them seem real and life-like to us even now.

In April, 1869, action was taken looking toward the better care of the insane poor, particularly those confined in the county poor houses. This subject had been brought to the attention of the Society in 1864 and again in 1867, but like many other reform measures, action was slow. It was in December, 1869, that a semi-scientific committee was appointed to investigate and report upon the origin of the Cardiff Giant, then on exhibition in the basement of Geological Hall. It is not recorded that they made any report, but there is no doubt that this presumably petrification of a primeval man was in the minds of the members of the committee a stupendous hoax, as later events showed it to be.

The meeting of January 10, 1870, was chiefly occupied with the consideration of a subject that is as old as the Society itself and as far from settlement at the present day as then. Time will not permit me to state the question. Suffice it to say, it was this: How far may the physician, a member of the County Medical Society go, by the means of the public press, to bring himself before the public without offending good taste or the rules of professional conduct; otherwise known as medical ethics. Some of our members had in the judgment of others grievously erred in this respect. The committee to whom the matter was referred investigated it carefully. Dr. Charles H. Porter, who was chairman of that committee as well as secretary of the Society, has given us a very complete report of the matter. A

report was rendered carrying with it a vote of censure. This was adopted by a vote of twenty-three against, eighteen voting otherwise.

In 1871 the Society again met in the City Hall, the attendance was good and the meetings were of the same character as those held at the Albany Hospital. An epidemic of cerebro-spinal meningitis occurring during the spring of that year occupied the attention of the Society for several sessions. During the next two years we find little on which to comment except that the reports of the papers read and the cases presented showed a gradual change in medical thought and methods.

In the month of May, 1873, our City Fathers came to the Society, propounding this important question, "Whether the water of the Hudson River was sufficiently pure and wholesome for a City Water Supply."

Dr. Albert Vander Veer was president of the Society at that time and after an interesting discussion in which the following took part: Drs. C. Devol, Levi Moore, W. G. Tucker, S. H. Freeman, R. H. Sabin, William Hailes, T. D. Crothers, James S. Bailey, William H. Bailey, W. H. Craig and Mr. Gustave Michaelis, my father, Dr. Levi Moore offered the following resolutions which I take the liberty of presenting in full:

"Whereas, The Common Council of the City of Albany has consulted this Society as to the admissibility of the water of the Hudson river for general use; therefore be it

"Resolved, That the Medical Society of the County of Albany do hereby acknowledge the courtesy of the Common Council of the City of Albany in recognizing the physicians of the city as the proper curators of the public health, and in consulting them in regard to the water supply;

"Resolved, That in the judgment of this Society the sanitary condition of the city would be impaired by the use of river water taken from a point near the city, and that typhoid, choleraic and other diseases might be disseminated thereby, inasmuch as the water cannot be freed from the contamination of sewage and factory waste, even by filtration according to any process yet known;

“Resolved, That this Society remonstrate against the use of the Hudson river waste for culinary and domestic purposes ;

“Resolved, That the Secretary of this Society be instructed to transmit copies of these resolutions to his honor the Mayor of the city of Albany, and to the Clerk of the Common Council.”

The first of these resolutions was adopted ; the rest laid on the table until the semi-annual meeting a month later. At that meeting the President announced that further discussion of the water question was uncalled for, as the Common Council had decided the matter by voting to use it.

At the June meeting in 1875 the Board of Censors reported that no candidates had applied to the Board to be examined for license to practice medicine and surgery. This would seem to indicate that they still possessed that power although in 1872 the Board of Regents of the State of New York were given the licensing power through a board of examiners.

On January 5, 1876, a most timely paper was read by Dr. Frederic C. Curtis on “Certain Points Connected with Typhoid Fever,” which had showed an increase in number of cases and in deaths during the preceding fall. He propounded this question, “How much has the use of our river water to do with it?” He showed this increase to be coincident with the pumping of river water into certain of the water mains of the city. It was during this year that one of our members offered a series of resolutions which showed that some desired to break away from many of the recognized rules of medical ethics. Fortunately for the welfare of the Society they were not adopted. The time was not yet ripe when such liberal views regarding the medical profession could be put in practice even in part and some would not be tolerated even at the present time.

In 1877 the old Committee on Hygiene appointed in 1873 was revived and the first report it presented was on School Hygiene, a subject that became in later years of paramount importance. During the next year, 1878, the following standing committees were appointed: On Registration, Pathology, and on Hygiene and the Relation of the Medical Profession to the Public, showing a desire for closer relation with matters outside the Society itself.

At the annual meeting, held October 14, 1879, eighty-five members were present. The President, Dr. F. C. Curtis, in his address, made a strong plea for one uniform, impartial standard for admission to the practice of medicine, the standards high and uniform and license to practise be conferred only by the University of the State of New York constituted by the Board of Regents. In 1880 the Society lost the power of licensing physicians that had been one of its cherished privileges since its organization in 1806.

On January 28, 1880, in the County Court room of the City Hall was held the last meeting in that building for on February 10th of that year the City Hall was destroyed by fire and the next regular meeting of the Society was held at the Albany Medical College in Alumni Hall which proved to be our regular place of meeting for many years.

While many believed in the old order of things there were others who believed in more freedom of action and at the annual meeting held October 10, 1882, the new Code of Ethics, adopted by the State Medical Society at its previous meeting was, on motion of Dr. S. B. Ward adopted by our Society without dissent.

The matter of school hygiene interested some in 1884 but apparently no concerted action was taken at that time, the Society as on other occasions in the past simply marking time. Meetings were regularly held, but, save at the annual and semi-annual meetings, the attendance was not large. Dr. Franklin Townsend, who was president in 1887, voiced one of our needs in order to secure results when in his annual address he said: "Much that could be done to enhance the interest and strength of our institutions can only be realized by strong cooperative methods."

During the years 1889 and 1890 typhoid fever and la grippe were subjects discussed on many occasions and the papers read were well written and of interest to all. Intubation of the larynx and serum therapy, especially in the treatment of diphtheria, also were matters considered during these last years of the third period in which I have divided my study of the Society.

Our last generation, from 1896 to the present time, was an important one. Great changes were taking place, higher stand-

ards in medical education were required and it is not surprising that the Medical Society of the County of Albany felt the influence of the times. The erection of the Bender Laboratory and the steps taken looking toward the erection of a new Albany Hospital appealed alike to civic pride and to greater interest in things medical. The discovery of the Roentgen ray and further advances in serum therapy gave opportunity to our members for many original papers of much interest.

Important was the meeting held on March 24, 1897, for it had much to do with the future welfare and healthfulness of Albany. I cannot refrain from dwelling for some length upon it. Four papers were read and discussed. They were as follows: "The Quarantine Isolation and Care of Contagious Diseases," by Dr. Lewis Balch. This paper ended with a plea for the establishment of a contagious disease hospital for those ill with other contagious diseases than small pox. This recommendation we find now exemplified in concrete form in Pavilion G of the Albany Hospital.

The second paper, "An Outline of a Plan of the Sewerage and Water Supply of the City of Albany," by Dr. L. H. Neuman; and the third paper, "Engineering Problems Involved," by Albert J. Hines, C. E., foreshadowed the building of the intercepting sewer and purification plant which has but recently become an accomplished fact. The last paper was, "The Board of Health in Relation to the Water Question," by Dr. F. C. Curtis. The writer of this last paper had in 1876 discussed the influence of our water supply upon the occurrence of typhoid fever. He urged now the purification of the water by the slow sand filtration system. After discussion the following committee of the Society was appointed to represent our Society before the Common Council in relation to the filter of the Hudson River water, namely, Drs. A. Vander Veer, O. D. Ball, Henry Hun, S. B. Ward and H. Bendell. The committee was also instructed to recommend the slow sand filtration system suggested by Allen Hazen, Consulting Engineer. That the voice of the Society carried conviction and that the work of the committees was faithfully done we who now reap the benefits from their efforts bear witness. Except at special meeting the attendance was small and

in 1901 we listened to another Jeremiad similar in character to that which each preceding generation had heard. But in spite of the pessimistic tone of the president that year, Dr. A. MacFarlane, in his annual address—important suggestions worthy of trial may be noted: Among them we find these words: “The function of the Society is lost sight of;” “It should consider the trades union spirit;” “Its purpose is not alone that of reading scientific papers and exploiting personal interests; its principal object should be chiefly caring for medical affairs affecting self and the community.” A closer bond between ourselves and community was shown in the following year when the Chamber of Commerce came to us asking for a certificate testifying to the healthfulness of the city. The year 1903 saw the formation of the Milk Committee or Commission, the usefulness of which no one can deny, and we also showed our interest in progressive ideas by favoring the unification of our educational system throughout the State. In 1904, Dr. S. B. Ward voiced the experience of many of our members when he reported the rapid lessening of typhoid cases due to the system of water purification adopted seven years before. This year also saw the beginning of the State Medical Library and the dreams of the founders of the Society became realities in the impetus this gave to research and information along medical lines. The more intelligent care of those in our county afflicted with tuberculosis occupied in part the minds of our members in 1905. The year 1906 saw the amalgamation of the two State Societies and the closer union of the County Societies with the State Society. All members of our County Society were now in virtue of such membership, members also of the Medical Society of the State of New York.

On May 8, 1906, Dr. George G. Lempe was chosen president, to be reelected for another term a year later. A feature of his administration was the number of prominent physicians from other cities and even from abroad, who read papers before the Society and participated in its medical discussions. Many papers of scientific interest and in accord with the trend of medical thought at that time were presented also by our members. Among those who were present with us from elsewhere I might mention, Dr. Abraham Jacobi, and Dr. Ramon Guiteras of New York;

Dr. H. L. Elsner of Syracuse, N. Y., Dr. Joseph Price of Philadelphia, Dr. J. E. Goldthwait of Boston, and from abroad Prof. Fredrich Müller of Munich. In April of 1907 we went on record as favoring medical school inspection and in October of the same year a volunteer corps of physicians instituted such work among the children attending our public schools. It is needless to enlarge upon the work of the last ten years; most of us can bring to mind many of the events that have made this period of time an important one in every sense of the term and we know our Society did not fail in meeting the issues as they arose from time to time.

War clouds began to overshadow the earth and many new problems were presented. It is a source of gratification to realize that the Albany County Medical Society was the first of the State County Societies to take any active interest in a preparedness program and when in 1917 we became involved no inconsiderable number volunteered their services. The same spirit was manifested in 1898 in the Spanish-American War. Many of our number served in the military service abroad, others in encampments throughout the country, while others in their medical capacity served as civilians on Local Draft or on Medical Advisory Boards. In spite of all this, attention was paid to matters relating to the welfare of our Society and of the profession at large. The Compulsory Health Insurance Bill first brought to our attention in 1916 has been actively fought and thus far with success.

Our legislative Committees have at all times been active and our Society has been indeed fortunate for many years in having had men qualified and ever energetic to care for this important part of its activities. Among those who have served as chairman in the past I might mention the names of Dr. Arthur G. Root and Dr. James F. Rooney. The retiring president in 1911, Dr. John H. Gutman, spoke in his address of Cooperation in Medicine. Applying this thought in a more specific manner I would state that this study of our County Medical Society has shown me that when we have failed to accomplish that which we have started to perform as has been frequently the case in our life history, lack of cooperation has been the underlying cause, and

even if we have officers and committees possessing the requisite qualifications for service, a most necessary factor in good work, as was expressed in Dr. Arthur J. Bedell's address when president in 1912, all will not go well with us unless all are working harmoniously toward one purpose, one ideal.

This medical Society should include in its membership all reputable practising physicians residing in this county, not only for what it would mean to this Society but for their own interest as well, for such membership carries with it all privileges and advantages that membership in the Medical Society of the State of New York confers. When we work unitedly much can be accomplished. Our Society has an enviable record, a continuous record of work since its organizations July 29, 1806. No reorganization has been necessary; it has always fearlessly met the problems that confronted it and never shirked the conflict. May our motto always be, in the words of Horace: "*Vestigia nulla retrorsum.*"

ALBANY HOSPITAL

SEVENTEENTH REPORT OF PAVILION F, DEPARTMENT FOR MENTAL DISEASES, FOR THE NINE MONTHS ENDING JUNE 30, 1919.

By J. MONTGOMERY MOSHER, M. D.,

Attending Specialist in Mental Diseases.

To the Board of Governors:

I have the honor to present the seventeenth report of Pavilion F, for the nine months ending June 30, 1919.

There remained in the Pavilion on October 1, 1918, thirty patients—sixteen men and fourteen women. There have been admitted one hundred sixty-five men and one hundred thirty-three women. The whole number of patients under treatment was, therefore, three hundred twenty-eight.

There have been discharged two hundred ninety-eight patients—one hundred sixty-seven men and one hundred thirty-one women, and there remained in the Pavilion at the end of the fiscal year, fourteen men and sixteen women.

The following tables show the forms of disease and the results of treatment for the year, and since the opening of the Pavilion:

TABLE I.—SHOWING THE FORMS OF DISEASE AND THE RESULTS OF TREATMENT FOR THE NINE MONTHS ENDING JUNE 30, 1919.

FORM OF DISEASE	Recovered		Improved		Unimproved		Died		Remaining		Total		Total
	M	W	M	W	M	W	M	W	M	W	M	W	
Acute delirium.....	4			1		3		3	1		5	7	12
Confusional insanity..	4	2	8	6	6	7			1	1	19	16	35
Melancholia.....	2	3	7	12	2	13	1	1	2	1	14	30	44
Mania.....	2	3	1	1	2	4				2	5	10	15
Primary dementia....	2		5	5	3	3			2	3	12	11	23
Recurrent insanity....			2		1	1				1	3	2	5
Chr. delus. insanity...			1	1	6	2				1	7	4	11
General paralysis....				1	7	2	1		1		9	3	12
Terminal dementia....			1	3	8	6	3	1	1	4	13	14	27
Idiocy and Imbecility.				2	4	3	1		2		7	5	12
Alcoholic delirium....	4		3				1				8		8
Alcoholism.....			36	3	1				2		39	3	42
Drug addiction.....			4	8	1	2	1				6	10	16
Neurasthenia.....				4						1		5	5
Hypochondriasis.....			1							1	1	1	2
Epilepsy.....			2		3						5		5
Hysteria.....		2	1	8		1					1	11	12
Organic brain disease.			1		2		3	1	2		8	1	9
Cerebral concussion...		1										1	1
Chorea minor.....		1										1	1
Meningitis.....							1				1		1
Tuberculosis.....			2				1				3		3
Pneumonia.....	2						1	3			3	3	6
Organic heart disease.			1								1		1
Aniline poisoning.....	1										1		1
Fracture of skull.....			1								1		1
Nephritis.....				1	2		1			1	3	2	5
Influenza.....			1					3			1	3	4
Attempted suicide....			1								1		1
No diagnosis.....											4	4	8
Totals.....	21	12	79	56	48	47	15	12	14	16	181	147	328

TABLE II.—SHOWING THE FORMS OF DISEASE AND THE RESULTS OF TREATMENT SINCE THE OPENING OF THE PAVILION, FEBRUARY 18, 1902.

FORM OF DISEASE	Recovered		Improved		Unimproved		Died		Remaining		Total		Total
	M	W	M	W	M	W	M	W	M	W	M	W	
Acute delirium.....	56	65	25	36	7	28	19	22	1	...	108	151	259
Confusional insanity..	21	18	65	75	65	109	5	6	1	1	157	209	366
Melancholia.....	37	57	81	176	94	182	7	16	2	1	221	432	653
Mania.....	13	24	20	47	54	75	1	...	...	2	88	148	236
Primary dementia....	11	10	51	39	95	60	1	...	2	3	160	112	272
Recurrent insanity...	1	...	19	28	21	32	...	...	...	1	41	61	102
Chr. delus. insanity..	...	...	5	8	72	72	...	1	...	1	77	82	159
General paralysis....	...	...	16	2	103	19	6	...	1	...	126	21	147
Terminal dementia...	...	...	61	51	201	171	49	30	1	4	312	256	568
Idiocy and Imbecility	...	...	26	22	63	59	2	...	2	...	93	81	174
Alcoholic delirium...	33	20	50	8	6	2	47	2	...	...	434	32	466
Alcoholism.....	20	5	51	66	40	10	5	...	2	...	581	81	662
Drug addiction.....	18	13	62	60	12	8	4	5	...	...	96	86	182
Ptomaine poisoning..	2	2	...	...	...	...	...	...	...	...	2	2	4
Nephritis.....	...	...	3	3	4	2	16	4	...	1	23	10	33
Eclampsia.....	...	1	2	1	...	1	...	1	...	...	2	4	6
Epilepsy.....	1	...	37	13	33	16	1	...	...	...	72	29	101
Neurasthenia.....	4	2	28	28	8	15	...	...	...	1	40	46	86
Hysteria.....	4	18	4	57	1	11	...	...	...	...	9	86	95
Chorea minor.....	1	3	1	1	2	1	...	...	...	...	4	5	9
Exophthalmic goitre.	...	...	...	1	...	...	...	...	...	...	...	1	1
Tic douloureux.....	...	...	...	1	...	...	...	...	...	...	...	1	1
Hypochondriasis.....	1	...	20	...	7	...	1	...	...	1	29	1	30
Organic brain disease	...	...	19	12	34	10	26	15	2	...	81	37	118
Cerebral concussion..	9	2	5	...	1	...	...	...	...	...	15	2	17
Oedema of the brain.	...	...	...	...	1	...	1	...	...	...	2	...	2
Locomotor ataxia....	...	...	...	3	7	2	...	2	...	...	12	7	19
Myelitis.....	...	...	...	...	1	2	...	2	...	...	1	4	5
Arthritis deformans..	...	...	...	...	...	1	...	...	...	...	...	1	1
Meningitis.....	1	...	1	2	...	1	15	3	...	...	17	6	23
Multiple neuritis....	...	...	1	...	...	1	...	...	...	...	1	1	2
Paralysis agitans....	...	...	...	...	3	1	3	...	...	...	6	1	7
Hydrophobia.....	...	...	...	...	...	...	1	...	...	...	1	...	1
Tetanus.....	...	...	...	...	...	...	1	...	...	...	1	...	1
Tuberculosis.....	...	...	11	...	5	2	33	5	...	...	49	7	56
Typhoid fever.....	3	1	...	...	...	...	...	...	...	...	3	1	4
Liver disease.....	...	3	...	1	...	...	2	2	...	...	2	6	8
Pneumonia.....	10	...	...	...	...	...	27	6	...	...	37	6	43
Heart disease.....	...	...	5	1	4	...	10	2	...	...	19	3	22
Pernicious anaemia..	...	...	...	1	...	...	...	1	...	...	...	2	2
Chlorosis.....	...	...	...	...	...	...	...	1	...	...	...	1	1
Septicaemia.....	...	...	...	...	...	...	2	1	...	...	2	1	3
Gastro-enteritis....	...	...	...	...	...	...	1	...	...	...	1	...	1
Fracture of skull....	...	...	1	1	2	...	5	1	...	...	8	2	10
Multiple fibromatosis	...	...	...	...	...	...	...	1	...	...	...	1	1
Carcinoma.....	...	...	...	...	3	...	...	1	...	...	3	1	4
Strangulated hernia..	...	...	...	...	...	...	1	...	...	...	1	...	1
Pleurisy.....	...	...	1	...	...	...	...	1	...	...	1	1	2
Malingering.....	...	...	...	...	1	...	...	...	...	...	1	...	1
Insolation.....	2	...	...	...	...	...	...	...	...	...	2	...	2
Attempted suicide....	...	...	1	...	...	...	...	...	...	...	1	...	1
Aniline poisoning....	1	...	...	...	...	...	...	...	...	...	1	...	1
Influenza.....	...	...	1	...	...	...	...	3	...	...	1	3	4
No diagnosis.....	...	...	...	...	...	...	...	...	...	...	39	26	65
Totals.....	547	244	1141	744	950	893	292	134	14	16	2983	2057	5040

This report includes the period of nine months ending with June 30, 1919, the change having been made to conform with the recent change in the hospital year. The number of admissions has been of the average of the last few years, a slight falling off having been noted in the alcoholics, an indication of improved public morals which may be regarded as permanent. The number of patients received each year since the opening of the pavilion has been as follows:

1902-'03 — 174	1910-'11 — 301
1903-'04 — 157	1911-'12 — 304
1904-'05 — 237	1912-'13 — 319
1905-'06 — 214	1913-'14 — 353
1906-'07 (19 months) — 386	1914-'15 — 378
1907-'08 — 216	1915-'16 — 416
1908-'09 — 197	1916-'17 — 435
1909-'10 — 272	1917-'18 — 379
1918-'19 (9 months) — 298	

This recapitulation reveals that for several years there has been an average of more than one admission a day. The average daily number under treatment for the past nine months has been thirty-two. The number of beds is thirty-three. The highest number of patients at any one time was forty-three and the lowest twenty. The total number of days of treatment was 8,549, making the average duration of residence twenty-six days.

Inasmuch as the patients are practically all emergency cases, an opinion may be formed as to the difficulties imposed upon the hospital and the care and energy needed to meet it. There has been some embarrassment in administration when as many as ten cots have been placed to accommodate the excessive number, but there has resulted a feeling of pride that the hospital is enabled to meet every request made upon it, and no patient has been refused unless he has declined to enter. It is possible to accept patients temporarily, as many remain only a few days or even a few hours, and the fluctuations in census from day to day justify acceptance of the occasional pressure.

The epidemic of influenza is ascribed as the exciting cause in twenty-nine cases. Of these fourteen followed immediately upon the outbreak of the disease in the autumn, ran an acute course, and terminated in a short time. Pulmonary complication proved fatal in several cases, and active delirium necessitated their admission to the hospital. The other cases appeared to be due in part to the debilitating effects of the disease upon the nervous system, and it is probable that for some time to come the origin of mental attacks in individuals otherwise predisposed may be ascribed to influenza. Inquiry in all admissions whose symptoms followed closely the date of the outbreak of the epidemic, has frequently confirmed this supposition.

There have also been several sharp cases of mental excitement among returning soldiers, but the majority of these patients exhibit a mild, though rather intractable nervous exhaustion, of which the more prominent manifestations are inability to concentrate the attention, early fatigue on exertion, and anxiety. As was surmised a year ago this condition may be most appropriately classified with the long understood phrase, traumatic neurosis, and the plan of treatment is sufficiently indicated by the diagnosis. During the latter part of the year provision has been made for these cases upon the general medical wards.

A constant source of anxiety to the administration, producing the greatest tension of its operations, is the possibility of suicide. Twenty-nine patients attempted suicide before admission, and fourteen threatened the act, making a total of forty-three so-called suicidal cases. The preferred method was poisoning which was attempted in fourteen instances, the favorite poisons being corrosive sublimate and iodine; denatured alcohol, chloroform, illuminating gas and rat poison were also used. One patient jumped from a window, four attempted hanging and one drowning. This is a formidable catalogue of the resources of human perversity, and as it is contemplated in recapitulation, the wonder is that none of these attempts proved successful. Great persistence is often manifested on the part of the patients, and considerable ingenuity on the part of the hospital is necessary in order to avoid a calamity of this kind without the evidence of

unpleasant restrictions. Suggestion by negation is fully as harmful as open discussion.

The anatomy of suicide has long afforded a problem for the psychologist. Statisticians, as a rule, ignore the pathological element, and seek explanation in social and economic conditions. Thus it has been affirmed that Germany has been most prolific in suicides, and among the Germans the incidence is greatest in the army. The reason is given that the severe discipline of the nation, the suppression of personal independence and initiative afford the basis for discontent and discouragement which find their sternest ally in the rigor of military discipline. Yet the fact remains that in the mind of the laity suicide is a definite demonstration of insanity. This cannot be true unless one accepts any emotional state as evidence of disease. It is not difficult to believe that conditions of life may be such as to justify or excuse any means of escape. Indeed, the marvel is that such suffering, misery and wretchedness as are observed, do not lead more frequently to self-murder. In a higher type of mind death is preferred to disgrace. And it is conceivable that a highly developed ethical sense may be mortally wounded by an error of judgment. Such is the theme of Hugo's immortal epic of the perennial struggle between inspired virtue and worldly justice. The life-long contention between Jean Valjean, the reformed convict, and Javert, the inspector of police, brings into strong relief the passive submission of the hero and the fundamental faith of the magistrate in the word of the law. Upon the latter there gradually dawns a question of the validity of his belief. In contemplative silence he regards the final convincing demonstration of his victim's moral courage, and in the supreme moment of final victory he lets his prisoner go.

"Until that day, Javert had taken, of the two attitudes of Napoleon, only that which expresses resolution, the arms folded upon the breast; that which expresses uncertainty, the hands behind the back, was unknown to him. Now a change had taken place; his whole person, slow and gloomy, bore the impress of anxiety. * * * * A beneficent malefactor, a compassionate convict, kind, helpful, clement, returning good for evil, returning pardon for hatred, loving pity rather than vengeance, preferring to destroy himself rather than to destroy his enemy, serving him who had stricken him, kneeling upon the height of virtue, nearer the angels than

men. * * * * * He said to himself that it was true then, that there were exceptions, that authority might be put out of countenance, that rule might stop short before a fact, that everything was not framed in the text of the code, that the unforeseen would be obeyed, that the virtue of a convict might spread a snare for the virtue of a functionary, that the monstrous might be divine, that destiny had such ambuscades as these, and he thought with despair that even he had not been proof against a surprise. * * * * * To be obliged to acknowledge this: infallibility is not infallible, there may be an error in dogma, all is not said when a code has spoken, society is not perfect, authority is complicate with vacillation, a cracking is possible in the immutable, judges are men, the law may be deceived, the tribunals may be mistaken! to see a flaw in the immense blue crystal of the firmanent!"

His philosophy of life thus exploded, as if by a thunderbolt, he passed to a guard-house, left "Some Observations for the Benefit of the Service," returned to the parapet, and plunged into the Seine.

Cato's destruction of himself was due to his anticipation of the slavery of his country under the domination of Caesar. Addison puts these words in the mouth of the dying hero:

"I am sick to death; oh, when shall I get loose
From this vainworld, the abode of guilt and sorrow?
And yet methinks a beam of light breaks in
On my departing soul. Alas, I fear
I have been too hasty! O ye powers that search
The heart of man, and weigh his inmost thoughts,
If I have done amiss, impute it not:
The best may err, but you are good, and —"

(*dies.*)

But suicide is not always a voluntary act, the result of mature reflection. It is a symptom of disease, and there are certain conditions in which it may be anticipated with a reasonable certainty. It is to be regarded as a manifestation of melancholia just as a febrile elevation of temperature attends an infection. The province of the hospital is to meet this morbid demonstration so far as is humanly possible. But, just as infection passes beyond control in an occasional case, so do these impulses, and there is the satisfaction at the end of the year in the record of prevention, which, it must be acknowledged, seems occasionally to be attained as the result of good fortune.

DISCHARGES.

Of the two hundred ninety-eight patients discharged, thirty-three recovered and one hundred thirty-five were improved. The percentage of cases distinctly benefited was fifty-six. Since the opening of the Pavilion the percentage of cases discharged as recovered and improved has been fifty-four. Ninety-five patients were discharged unimproved, and twenty-seven died. The causes of death were: exhaustion of alcoholism, one; pneumonia, eight; organic brain disease, six; nephritis, one; meningitis, one; heart disease, one; general paralysis, one; exhaustion, two; influenza, three; tuberculosis, one; debility of old age, one; locomotor ataxia, one.

Of the five thousand forty patients admitted in seventeen years, twenty-six hundred seventy-six have returned to their homes with health restored.

ACKNOWLEDGMENT.

It is a pleasure, each year, to make public acknowledgment of the courtesy and cooperation of the City Department of Charities. Cordial relations have been maintained since the opening of the Pavilion in 1902, and the importance of this mutual understanding cannot be over-estimated. By a special statute the Commissioner of Charities possesses the magisterial power of commitment for a few days of alleged cases of mental disease for observation and determination. In a large city like Albany there arise many instances of misbehavior for which the analysis afforded by this plan is necessary. It undoubtedly prevents many unjust detentions in custodial places, and relieves many temporarily distressing situations. To Commissioner Quentel and his associates the hospital owes an increasing debt of gratitude.

It may not be improper to add an expression of approval of the work of the nurses. Their activities on the ward are manifestly in the line of routine duty, and they receive in the way of education and training a greater benefit than they give. But the service is not always pleasant and is often attended by anxious responsibility. There is yet to be recorded any concrete instance of neglect of duty, and the willingness and sympathy always

apparent not only add much to the effectiveness of what might prove a dull routine, but inspire confidence in patients and thus contribute to their well-being and even to recovery. Two years ago, Miss Alice Klute, who had carried the ward upon her shoulders for twelve years with a loyal spirit which threatened health, resigned to engage in duty with the Red Cross. Miss Margaret Flanagan was appointed to the vacancy, and has maintained the wards upon the highest plan of efficiency.

The improvements described as well under way in the report for 1918, have been completed. The Board of Supervisors of the County of Albany, after personal inspection, responded without question, to the apparent need of repairs, and this undertaking of some magnitude was finished in the autumn. The new bath rooms have been serviceable and have added much to the preservation of sanitary conditions. The connecting corridor with the main building, which was developed into a solarium, has been furnished with reclining chairs, a couch, and other allurements for repose and quiet, and has amply justified the expectations of its sedative and consolatory possibilities. There has been placed in it the "Anna S. Lawler Memorial Library." Mrs. Lawler died in the winter, and her husband, Mr. Thomas C. Lawler, presented her collection of books, in number about four hundred, for the diversion of the patients of this department of the hospital. The selection of literature is a good one, and varied to meet many tastes. In addition to this eight volumes of standard fiction have been received from Mrs. Norah Mack, seven volumes of mystery tales from Mr. and Mrs. P. K. Dederick, Jr., three illustrated reports on Adirondack surveys from Mr. Verplanck Colvin, and novels and packages of magazines from Mr. Thomas C. Lawler. To Mr. Lawler we are also indebted for two framed pictures. The attractiveness of the halls and rooms has been enhanced by the hanging of seven pictures from the estate of the late Mrs. Catherine Gansevoort Lansing, some of these highly prized paintings in oil.

For Christmas day Miss Ethel Van Benthuyzen prepared a tree with decorations, and electric illumination was provided through the kindness of Mrs. John Huyck. Cigarettes and candies were distributed by Mr. C. Van Merrick and one potted

plant has been received from Mr. John Engett. Subscription to *McClure's Magazine* has had the usual renewal by a friend and former patient.

This acknowledgment of the kindness and thoughtfulness of many friends is made with a deep sense of gratitude. These apparently unnecessary agents of treatment are not always regarded at their true value. Assurance may be given that the incidental evidences of comfort go far toward relieving apprehension and suspicion on the part of patients, whose distorted imaginations, accentuated by unwise solicitation, may be relieved by the attractive and home-like appearance of a ward where they may have anticipated harshness. In like manner the liberal appropriation by your Board for carpets has relieved a clatter which had become distracting. The physical condition of the building is now satisfactory, and through the thoughtfulness of the Governors and of other friends has reached a state of which no just complaint can be made.

In this connection a word may be said in tribute to your late President, Mr. J. Townsend Lansing. His sudden death occurred shortly after the close of the hospital year and while this report was in preparation. As you well know he assumed the obligations of his office without reservation as to their extent, and responded to every demand upon his time and upon his counsel. There came naturally to him many questions for solution as to the policy of the department for mental diseases. These included matters of internal administration and of relations with public authorities and the community at large. It is worthy of note that at the beginning and throughout he required that the interests of nurses and employes should be regarded with the same care as those of patients. He manifested a fine sense of justice and equity. Beyond this no appeal in behalf of a patient was made in vain. He visited the wards and studied their needs. No report of this kind would be complete without expression of the sense of personal affection he had inspired in officers and employes of the hospital. The loss is a great one and his unfailing evenness of temper, his anxiety to relieve distress, his sympathy and humanity will remain as a blessed memory and an inspiration.

Editorial

It will be said that the powers of those medicines, which are found most effectual in the cure of diseases, were not discovered by men of uncommon sense and penetration, but some by mere accident, others by ignorant savages and others we owe to the chymical enthusiasm of a credulous age, which hot in the pursuit of the philosopher's stone, stumbled on discoveries in medicine, and other arts, far more beneficial to mankind than the object they pursued even had they obtained it; but that few discoveries of this nature were made by men of science in consequence of study and reflection.

There is no denying this assertion, and the reason is plain:—When the most profound sagacity is exerted on subjects beyond its reach it is on a level with the grossest stupidity: All the sense and learning in the world cannot *a priori* find out the qualities of any simple or mineral whatever. If the roots of rhubarb and ipecacuanha were produced to an assembly of physicians or chymists, who had never seen or heard of them before they never could by any reasoning, examination or process whatever, discover that the one is possessed of a purgative and the other of an emetic quality; or if they were told that each was endowed with one of those qualities, all their skill would be baffled in attempting to ascertain which was the emetic, and which the purgative.

Medical Sketches, 1786.

JOHN MOORE.



Changes and Progress in Medical Education.

The standards for medical education have been rapidly elevated since 1905. At this time the Council on Education of the American Medical Association proposed certain standards which were fully satisfied by all the best schools of the country by the year 1915. With this general raising of standards various states passed laws concerning the right to practice; this also had an important influence upon the elevation of medical requirements. In 1913 New York State required, by law, one pre-medical year in addition to the high school course before granting

a medical student's qualifying certificate and in 1917 the public health law, chapter 45, of the consolidated laws to provide for the preliminary education of medical students stated that "the degree of bachelor or doctor of medicine shall not be conferred in this state before the candidate has filed with the institution conferring it the certificate of the Regents that before beginning the first annual medical course counted toward the degree, he had earned a medical student qualifying certificate in accordance with the rules of the Regents. The minimum requirement, for matriculates after January 1, 1917, in determining a candidate's qualification for matriculation in a medical school or for admission to the medical licensing examinations, the Regents will accept evidence of the successful completion of *two* years of college work in an approved college of liberal arts and science after the successful completion of four years work in an approved secondary school."

In addition to the two years in college the student must spend four years in medical college and many states now require, for admission to the practice of medicine, a year's internship in an approved hospital. Thus seven years after graduation from the high school are required before a man is entitled by law to practice medicine in many states and it is very probable that this fifth, or hospital, year will shortly be adopted in New York State. Because of these greatly increased requirements the number of medical students has diminished in the United States from 28,142 in 1904 to 13,052 in 1919, and the number of medical schools in the corresponding time has diminished from 160 to 85.

In considering these figures it must be borne in mind that although the reduction is great in the number of medical students and the number of schools, the effect has been greatly to improve the value to the community of the medical service by the graduates in more recent years.

The cost of medical education at the present time is very great. The student's fees cover, at any of the good schools, not more than from one-half to one-fifth the actual cost of instruction. The expense involved in securing a medical education is considered by some to be the reason that it is difficult to induce young men to settle in practice in small towns. Others

believe that the conditions for practice are due to the dissatisfaction the young men feel in not having suitable laboratories, hospitals and instruments for the type of work to which they are accustomed by their medical training, and which they might secure if they settle in larger centers.

There is no doubt that these are contributing causes but the chief reason for the lack of medical men in such small villages is purely economic. A survey of the villages which are now without medical service shows in many instances that the population in these localities has greatly diminished because of local changes in the population due to a change in markets, scarcity of farm labor, removal or suspension of industrial enterprises, or other similar conditions. The scarcity of medical attendants in these small outlying towns is a matter for serious concern but it should not be met by sending out poorly trained and otherwise unqualified doctors. In the summer the automobile allows the physician to take care of these distant villages satisfactorily. This is particularly true if he has the assistance of a well trained public health nurse who is resident in the community. At this time of year also older physicians who still wish to do a little practice may lead a pleasant and useful life by doing medical work in communities needing such service.

In the winter, however, when there is apt to be even more sickness and the weather conditions are not favorable to travel by automobile, the problem of adequate medical service for the small outlying village is a real one which has not yet been met. The properly trained public health nurse and salaried health physician may help to solve this problem. There is so little distinction between the very poorly trained doctor, the chiropractor and the osteopath, that surely the former will help but little to correct the faults and defects of the latter. It also seems possible that with the proper development of group practice arrangements will be made to extend adequate medical service perhaps by rotation of residence in order to allow contact with other members of the group.

It is probable, furthermore, that the present scarcity of doctors occasioned by the greatly increased standards of medical education, by the war, and because of the recent influenza epi-

demic, has already reached the lowest point. This year the classes at most of the medical schools in this state are filled and the premedical years in the colleges also have an unusually large attendance.

Of the 184 applications for admission to the Albany Medical College for the session 1919-1920, 103 men were rejected, 24 because of limitations in numbers of students admitted to each class, particularly in the last two or clinical years. This limitation is owing to the lack of clinical material which can be utilized at the present time under suitable laboratory and nursing aids. Limitation also is important in order to maintain that intimate personal relation between the students and teachers which is the very essence of successful teaching and should be particularly emphasized in the teaching of medicine.

Eight men were rejected because they had not had organic chemistry, which can be taught as well in the college or scientific school as in the medical school, and also owing to the great development of physiological chemistry there is barely sufficient time in the medical school for this branch of chemistry. Therefore, organic chemistry is required before admission to the Albany Medical College. This allows more time to be given to the rapidly growing and vitally important branch of medical chemistry.

Forty-one men were rejected because of conditions. A rule has been made that no men conditioned in other medical schools should be given make-up examinations by the Albany Medical School and admitted to classes higher than the class to which they would be re-admitted in the school which they had previously attended. This rule is made so that conditioned students will not go from school to school in search of lower standards. Few schools can carry the burden of taking conditioned students and allowing them to pass on to succeeding classes. With few exceptions such students tend to hold back the others and to lower the standards of instruction,

Thirty men were rejected because their qualifications did not meet the present State requirements which were quoted above. Notwithstanding these rejections and the greatly elevated standards for admission to the medical school the number of students

in the first year class of the Albany Medical School has more than doubled since last year and the premedical classes at Union College have enrolled forty-two students in the first year and thirty-seven students in the second year.

It will be seen that the scarcity of medical men at the present time is apparently only temporary and the demand for well trained men is, and will be rapidly met. There are also great changes occurring and about to occur in medical practice which are quite certain to be factors in determining the nature of medical education. Reference has been made to the so-called group medicine, which may also be applied to public health and industrial medicine as well as to practice. Such development cannot be ignored in the training of medical students of the future. The proper development and organization and coordination of the activities of such groups of medical men would appear to be the most satisfactory way of correcting certain obvious defects in medical practice.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF SEPTEMBER, 1919.

Consumption	11	Bright's Disease	8
Typhoid Fever	0	Apoplexy	9
Scarlet Fever	0	Cancer	8
Whooping cough	0	Accidents and Violence.....	9
Measles	0	Deaths under 1 year.....	16
Diarrheal Diseases	6	Deaths over 70 years.....	21
Pneumonia	4	Death rate	11.85
Broncho Pneumonia	3	Death rate less non-residents	9.63

Deaths in Institutions.

	Non-Res.	Res.		Non-Res.	Res.
Albany Hospital	6	7	Maternity Hospital	2	4
Albany Hospital Camp..	1	3	Public Places	0	1
Albany Orphan Asylum.	0	1	St. Margaret's House...	3	1
Albany Penitentiary	1	0	St. Peter's Hospital	2	8
Child's Hospital	0	1		—	—
County Hospital	1	0		19	37
Homeopathic Hospital ..	2	8			
Hospital for Incurables.	0	2	Births		168
Home for the Aged.....	1	1	Still Births		7

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	13	Mumps	7
Scarlet Fever	5	Pneumonia	8
Diphtheria and Croup	4	Influenza	17
Chickenpox	4	Septic Sore Throat.....	7
Smallpox	0	Acute Anterior Poliomyelitis	1
Measles	1	Ophthalmia Neonatorum ...	1
German Measles	0		—
Whooping-cough	9	Total	96
Tuberculosis	19		

Number of days quarantine for scarlet fever:

Longest..... 31 Shortest..... 30 Average..... 30½

Number of days quarantine for diphtheria:

Longest..... 25 Shortest..... 14 Average..... 19½

Fumigations:

Rooms..... 85 Buildings..... 19

Milk bottles disinfected

79

Communicable Diseases in Relation to Schools.

	Reported	D.	S.F.	M.
Public School No. 3.....	1	..	..	..
Public School No. 15.....	1	..	..	..
St. Joseph's Academy	2	..	..	..

MISCELLANEOUS.

Cards posted for communi-		Inspections and reinspections	29
cable disease	9	Vaccinations	206
Cards removed	5	Vaccination dressings	382
Notices served on schools..	31	Children examined for em-	
Notices served on stores and		ployment certificates	36
factories	5	Number of employment cer-	
Postal card returns sent to		tificates issued	35
doctors	9	Taking specimens of blood	
Postal card returns received		for Wassermanns	7
from doctors	5	Taking smears for Gonococci	6

Tuberculosis.

Living cases on record October 1, 1919..... 893

Cases reported:

By card 17
 Dead cases by certificate..... 2 19

912

Dead cases previously reported..... 9
 Dead cases not previously reported..... 2
 Removed 3
 Died out of town..... 0
 Recovered 0
 Unaccounted for 0 14

Living cases on record October 1, 1919..... 898

Total tuberculosis death certificate..... 11

Non-resident deaths:

Albany Hospital Camp 2
 C. F. L. Pavilion..... 0
 County Hospital 1
 St. Margaret's House 0
 City at large 1 4

Resident deaths 7

Visits to cases of tuberculosis..... 25

Miscellaneous visits 34

LABORATORY REPORT.

Diphtheria.

Initial Positive 10 Unsatisfactory 3
 Initial Negative 212
 Release Positive 14 Total 268
 Release Negative 29

Sputum for Tuberculosis.

Positive 16 Unsatisfactory 1
 Negative 104
 Total 121

Widals.

Positive 8 Unsatisfactory 7
 Negative 29
 Total 44

Meningococcus.

Positive	0	Negative	0
		Total	0
Wassermann tests	268	Gonorrhea Examinations ..	69
Milk Analyses	182	Miscellaneous Examinations.	0
Water Analyses	0		
Pathological Examinations .	3	Total Examinations	955

HEALTH PHYSICIAN'S REPORT.

Cases assigned	24	Calls made	62
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DIVISION OF SANITATION.

Inspections	55	Reinspections	82
Plumbing	18	Plumbing	14
Sanitary	37	Sanitary	68

HEARINGS.

Hearings	4	Cases heard	6
Filthy premises	5	Manure	1
Reinspection	6	Abated	0

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections	106	Smoke	0
Old Houses	73	Blue or red	0
New Houses	33	Peppermint	4
Permits issued	67	Water test	16
Plumbing	56	Houses examined	21
Building	11	Re-examined	56
Plans submitted	6	Valid	9
Old buildings	5	Without cause	12
New buildings	1	Violations	0
Houses tested	20		

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	7	Cats removed	53
Dogs removed	30		
		Total	90

DIVISION OF MARKETS AND MILK.

Public market inspections...	14	Milk cans inspected.....	536
Market inspections	75	Milk cans condemned.....	0
Fish market inspections	6	Lactometer readings	89
Fish peddler inspections	0	Temperature readings	89
Slaughter house inspections ..	0	Fat tests	0
Rendering establishment in-		Sediment tests	34
spection.....	0	Chemical tests	0
Pork packing house inspec-		Cows examined	542
tions	0	Cows quarantined	3
Hide house inspections	0	Cows removed	0
Milk depots inspected	17	Complaints investigated	3
Stores inspected	44	Milk houses inspected	55
Dairies inspected	55	Cows rejected	7

Medical News

THE MEDICAL SOCIETY OF THE COUNTY OF SCHENECTADY has issued the following statement:

IS COMPULSORY HEALTH INSURANCE INEVITABLE?—This is the first question that the Committee on Public Information of the Medical Society of the County of Schenectady had before it when we undertook the investigation of the subject of Compulsory Health Insurance.

We had heard for several years the often-repeated statement that Compulsory Health Insurance was inevitable and that the medical profession had better make the best of it. When we came to study the actual data at hand we found several very interesting facts which are briefly as follows:

Ninety per cent of the "inevitability" talk can be traced directly to Mr. Andrews and a few other propagandists for Compulsory Health Insurance. It is part of the propaganda.

Only an overwhelming popular demand will make inevitable a law which will reverse the very history of the State and substitute for a policy of individual liberty and self help a policy of control of the individual and State help. There is in this State almost no popular demand for any such change.

The only persons who are alleged to benefit from this distinct class legislation are the laboring people. It is well known that the farmers, the merchants, the manufacturers and the common people are against Compulsory Health Insurance. Even labor is not in favor of Compulsory Health Insurance.

In California last fall the whole stage was set in favor of Compulsory Health Insurance. The legislature had passed a constitutional amendment in favor of it. Hiram Johnson was in favor of it. The so-called commission to investigate the subject, composed chiefly of American

Association for Labor Legislation propagandists, had reported in favor of Compulsory Health Insurance. The professional labor leaders were for it. There was an intense education campaign extending over the entire State. *When the question came to a state-wide popular vote Compulsory Health Insurance was defeated by a vote of nearly 3-1 and labor did not support the measure.*

In Utica last spring there was a campaign of education on the subject followed by a popular vote on the subject. Thirteen thousand factory employees voted on the subject. Did they vote for it, or 2-1 against it, or even 10-1 against it? *No, they voted 12,875 to 112, or 100-1 against Compulsory Health Insurance.*

Any law which is fundamentally unjust; which demands that industry pay fifty per cent of the costs when industry is responsible for less than one per cent; which teaches the doctrine that it is unhealthy to work; and which substitutes a policy of control of the individual and forced charity for the policy which has made this country what it is—such a law is not in our opinion inevitable.—*Committee on Public Information, Medical Society of the County of Schenectady.*

PERSONAL.—Dr. WARDNER D. AYER (A. M. C., '10), of Syracuse has retired from practice with Drs. Heffron and Alsever, and has opened an office for the practice of internal medicine, with special attention to neurology at 320 Physicians Building, Syracuse, N. Y.

—Dr. HENRY M. GROGAN (A. M. C., '10), announces the opening of his office at 84 Willett street, Albany, N. Y., for practice, limited to diseases of the ear, nose and throat.

—Dr. E. MARTIN FREUND (A. M. C., '16) has returned from overseas, and has resumed practice at 154 Lark street, Albany, N. Y.

In Memoriam

JOHN F. BEIERMEISTER, M. D.

Dr. JOHN F. BEIERMEISTER, a graduate of the Albany Medical College of the class of 1910, a member of the Phi Sigma Kappa fraternity, died October 24, 1919, at his home in Rochester during an attack of angina pectoris. Dr. Beiermeister was born in Troy and received his early education in that city. After his graduation in medicine he passed a year at the Lying-in Hospital in New York. He then went to Rochester where for sixteen months he was an interne in the General Hospital and eight years ago began private practice in that city. He leaves his wife, Marian F. Beiermeister, a daughter, Lorna Jean Beiermeister, both of Rochester; his parents, Mr. and Mrs. J. M. Beiermeister, and a sister, Edna Beiermeister of Troy. He was a member of the Rochester Pathological Society, the Rochester Medical Club, and the State and County Medical Societies.

ALBANY MEDICAL ANNALS

Original Communication

VALVULAR DISEASE OF THE HEART

Read before the Washington County Medical Society, October 7, 1919.

By D. C. McKENZIE, M. D.,

Granville, N. Y.

Valvular disease of the heart may be caused by many conditions. The lesions may be congenital, they may be caused by many acute diseases, by focal infection or by any condition that produces a degeneration of the heart muscle. Arterio-sclerosis may also be a cause. Probably the greatest number of cases follow an attack of acute articular rheumatism.

There are four elements that enter into and cause the normal heart sounds: (1st) muscular contraction, (2nd) closure of the valves, (3rd) stretching of the chordæ tendinæ (4th) the contraction of the papillæ.

The heart sounds are known as the first and second sounds. The first or longer sound is heard at the contraction of the ventricles, the second or shorter sound is heard at the contraction of the auricles. Any condition that interferes with the proper action of the valves of the heart causes the so-called murmur. A murmur may be so slight as to be scarcely heard or may be so great as to completely displace the normal heart sound.

In listening to murmurs of the heart there are four important points to remember: (1st) time, (2nd) location, (3rd) transmission, (4th) quality.

Time. You must be able to tell whether the murmur is systolic, presystolic or diastolic in time. The best place to time a murmur is to put your finger on the carotid: a beat in the carotid corresponds with the first sound of the heart or the systole of the left ventricle. Presystolic or diastolic murmurs are always heard when the ventricles are relaxed.

Place. You must decide where the murmur is best heard, whether over the apex or base of the heart and whether in the aortic, pulmonic or mitral area. The aortic area is situated at

the second intercostal space to the right of the sternum. The pulmonic area is at the second intercostal space at the left of the sternum. The mitral area is at the apex of the heart.

In general all murmurs heard at the aortic area are aortic murmurs and all murmurs heard at the apex are mitral murmurs, so murmurs may be generally classed as follows:

A systolic murmur heard at the apex—mitral regurgitation;

A presystolic murmur heard at the apex—mitral stenosis;

A diastolic murmur heard at the aortic orifice—aortic regurgitation;

A systolic murmur heard at the aortic area—aortic stenosis.

All murmurs are either regurgitant or stenotic. The transmission of a murmur is very important. Mitral regurgitation is heard at the apex and is transmitted in the same intercostal space to the axillary line, at the nipple and may often be heard on the back at the angle of the scapula. Mitral stenosis is heard at the apex and is transmitted to the right, one-half inch beyond the border of the sternum.

Aortic regurgitation is heard in three places: over the aortic area, at the fourth intercostal space on the left close to the sternum and at the ensiform cartilage. Twenty-five per cent are heard over the aortic area, fifty per cent are heard at the ensiform cartilage, but one hundred per cent must be heard at the fourth left intercostal space. This murmur is transmitted to the left in the fourth intercostal space and often, in following this murmur along this space, as you approach the axillary line, the murmur loses its soft blowing character and you hear a rumbling harsh murmur very suggestive of mitral stenosis—in fact it is very difficult to distinguish between them. This murmur is known as the Austin Flint murmur.

Aortic stenosis is heard at the second left intercostal space and is transmitted to the carotid, the clavicle and at times may be heard down the whole length of the spine.

As to quality, murmurs are always soft or harsh. Regurgitant murmurs are always soft, stenotic murmurs are always harsh.

In disease of the heart we may learn a great deal from the inspection of the patient that will aid us in arriving at a correct diagnosis.

Dyspnœa caused by exertion that is relieved by rest in the re-

cumbent position is in the majority of cases due to mitral disease. There are several varieties of dyspnoea. In the terminal stage of heart disease where we have dilatation and loss of compensation we have constant dyspnoea and this is made worse by lying flat on the back; this is to be distinguished from the dyspnoea of emphysema in which the patient is more comfortable on his back.

The dyspnoea due to Stokes-Adam syndrome is characterized by the extremely slow breathing, sometimes there being only six or eight respirations to the minute. There is another kind of dyspnoea that has no reference to the heart and is known as the Cheyne-Stokes respiration. This was formerly thought to be the sure forerunner of death, but we know that this often occurs and still the patient recovers. However, if this occurs in meningitis, nephritis or diabetes we are very apt to have a fatal termination. We get a certain amount of dyspnoea in arterio-sclerosis. This is probably due to the sclerotic changes in the heart itself and it is for this reason that we get more dyspnoea in chronic interstitial nephritis than we do in chronic parenchymatous nephritis.

If, on examination of the patient, you find œdema of the feet and legs that disappears when in bed you may be sure that the trouble is mitral. This kind of œdema is called ascending œdema in contra-distinction from the œdema that occurs in the face, eyelids, etc., which is always due to kidney trouble and is known as descending œdema. There is one other kind of œdema that may be mentioned and is called idiopathic lateral œdema. One leg may be swollen from the toes to the hip without œdema in any other part of the body. This may be due to some pressure on the venous supply by a large fecal mass or some new growth.

If in a patient after exertion you find his lips become blue and his skin more or less cyanotic you may be sure you are dealing with trouble at the mitral valves, while on the other hand if the patient becomes pale and faint you may be sure you have trouble at the aortic orifice. If the patient is cyanotic all the time you probably have the terminal stage of heart disease.

An enlarged heart may be due to hypertrophy or dilatation, which you cannot tell by percussion, but on inspection in the dilated heart the heart is always in a state of tremor, hence the apex beat is seen covering a wide area and the heaving impulses

are widely distributed, while in hypertrophy we get one large heaving impulse at one point.

We may also see a pulsation at the ensiform cartilage and this is due to hypertrophy of the right heart. Hypertrophy of the right heart may be due to emphysema or may be secondary to trouble in the left heart.

To find the normal apex beat in the male, measure one inch to the right from the nipple, draw a perpendicular line through this line, then draw a transverse line along the fifth interspace, and where these lines cross will be the normal position for the apex. In the female, where the nipple cannot be used as a guide, draw a line at the left border of the sternum and a line at right angles to this in the fifth intercostal space, then measure on the horizontal line two inches from the border of the sternum, and this will be the normal position of the apex.

In children the normal apex is found in a different position and this is found by placing the child on his back and laying the left arm parallel with his body, now draw a line close to and parallel to the arm from the axilla and a second line at the left border of the sternum, now connect these two lines with a line drawn in the fifth interspace, and a point on this line equally distant from the other two lines will be the normal apex for a child.

We may have a displaced apex due to different conditions. If the apex is displaced but still remains in the fifth intercostal space it is due to mitral regurgitation. If the apex is displaced to the left and downward to the sixth, seventh or eighth interspace then it is due to aortic regurgitation, for, as you know, in this we get a great amount of hypertrophy of the heart. If you find the apex in the fourth intercostal space then you have mitral stenosis, for in this disease the left ventricle has less work to do and so becomes smaller. If the apex is not displaced to the right or left but downward to the sixth interspace this is probably due to chronic nephritis, as the hypertrophy caused by nephritis is in a longitudinal rather than in a transverse direction, as it is in primary heart conditions. So we see that from these facts alone it might be possible to make a diagnosis even if no murmur had been heard.

If you have a pericardial effusion that is slight you will have

no change in the apex beat, but if great in amount the apex beat will be entirely lost. To prove whether there is fluid in the pericardium put the patient in the Trendelenburg position, when the fluid will gravitate to the base of the heart and the apex beat will again appear. If the precordium of a child is bulging you probably have hypertrophy of the heart, but if this occurs in the adult you probably have an effusion in the pericardium.

Pulsation of the arteries of the neck is only seen in aortic regurgitation or goiter. If the jugular veins are turgescient and pulsating the trouble is in the right heart and we have to deal with tricuspid regurgitation.

We may learn some very interesting things from palpating the pulse. It is best to feel the pulse in both arms at the same time, for often the right radial pulse is anatomically smaller than the left, and, another reason, one of the radial pulses may be missing. If this is so then look for the brachial artery, and, if found, there is probably some anatomical defect; but if the brachial is missing you probably have to deal with an aneurism of the arch of the aorta.

In arterio-sclerosis you can often judge the amount of sclerosis by the radial artery, and if found here it is apt to be found throughout the whole arterial tree. The reverse, however, is not true, for in many people, especially fleshy people, we find a sclerosed condition of the smaller arteries which is not found in the radials. By palpation you may distinguish three stages to the sclerosed radial artery: (1st) when you can roll the artery like a pipe under your finger, (2nd) the first stage plus a tortuous artery, and (3rd) the first two stages plus the deposit of calcareous material in the walls of the artery; this condition we call atheroma. When arterio-sclerosis is due to an infection its course is rapid, six months to one year, but when not, the course is very slow, often extending over a period of twenty years or more.

In the diagnosis of heart disease, if a man has a normal heart the position of the arm does not change the rate or pressure of the pulse. In ninety per cent of the cases of mitral regurgitation the pulse will be less with the arm in the upright position. If the difference is only slight it shows that the heart muscle is in fairly good condition, if the difference is very much it shows that the

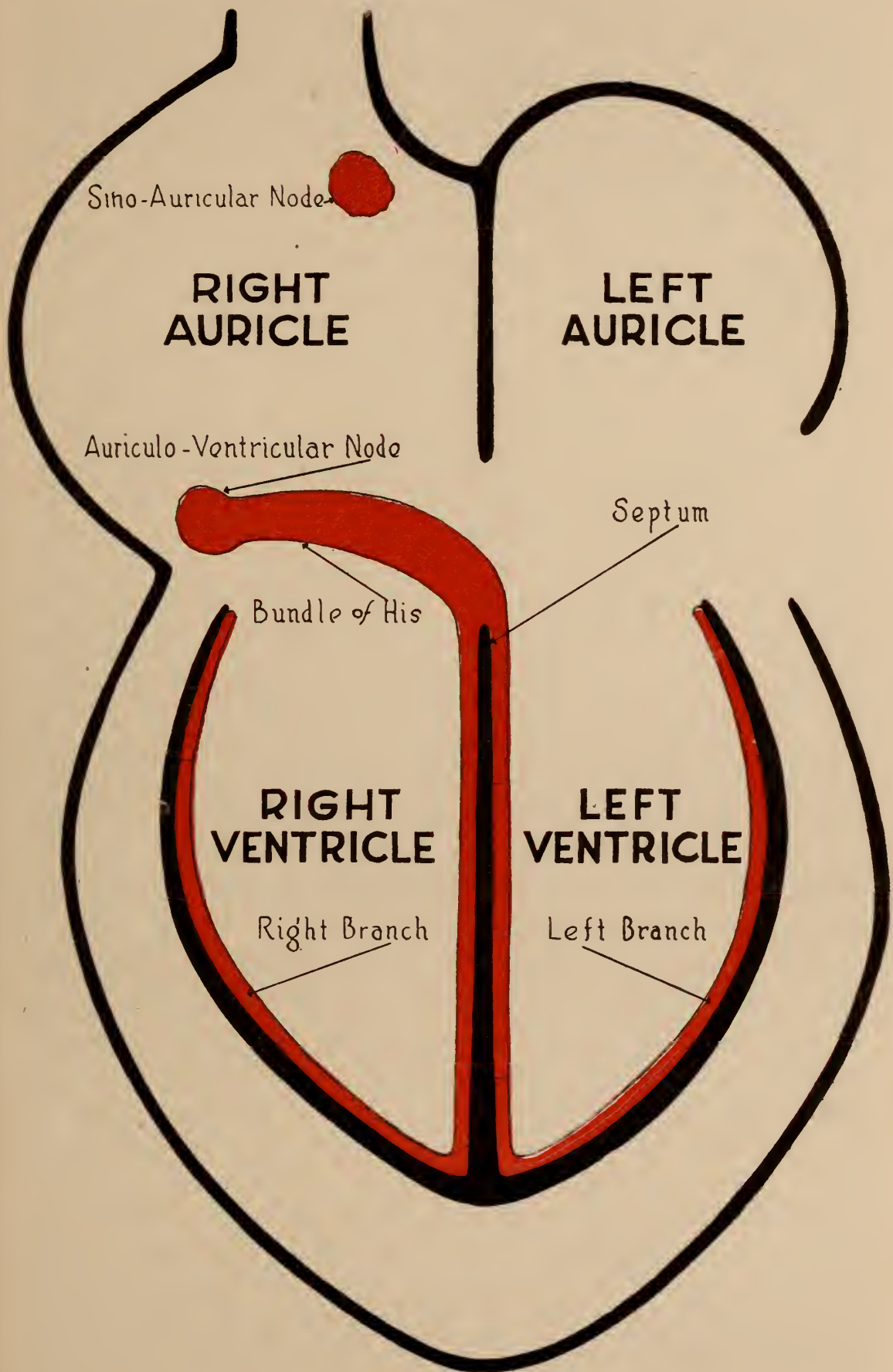
heart muscle is poor and the prognosis is not so good, but if the pulse is gone it shows that the muscle is decompensated and the prognosis is very bad. If the pulse stays good little or no treatment is needed.

In aortic regurgitation you get the Corrigan pulse. This is caused by the large heart contracting with great force, and the cavity of the left ventricle being large, a large amount of blood is forced into the artery, but as the valves are incompetent the blood rushes back at the end of contraction and we have what is known as the waterhammer pulse. This is the only disease in which we get this pulse. We also find the pulse in the uplifted arm in this disease shows this peculiar pistol-shot character more than when in the prone position.

In aortic stenosis the pulse is slow and does not change when the arm is in the upright position. We can learn a good deal from the rate of the pulse. A pulse of thirty-five in the absence of aortic stenosis spells heart bloc, if below twenty, complete heart bloc. You may have a slow pulse in typhoid fever and meningitis but later it becomes intermittent; you may also get a slow pulse in diabetes. You have a rapid heart in scarlet fever and if it becomes slow during the course of the disease look out for nephritis. In dilated heart and myocardial degeneration we get a rapid weak pulse. In uræmic coma we get a rapid pulse of high tension while in diabetes we get a slow pulse of low tension. A pulse of one hundred is never physiological.

In this connection I want to say a few words in regard to heart bloc. Although not a valvular disease it is so often accompanied by valvular disease and myocardial degeneration that it may not be amiss to spend a few moments in an explanation of this somewhat frequent heart condition. For this purpose I have made this rough drawing which may help to make clear what I have to say.

Before we can understand a derangement of the heart's action a detailed knowledge of the mechanism of the normal cardiac contraction is necessary. The succession of events constituting a normal cardiac cycle is initiated by a stimulus originating in a small mass of highly sensitized tissue at the junction of the superior vena cava and the right auricular appendix, and is called the sino-auricular node. Successive stimuli are generated



at this node with absolute regularity during periods of about eighth-tenths of a second, each thus determining the duration of a normal cycle. The sino-auricular node is normally the most excitable portion of the heart and determines both the rate and rhythm of the heart, or, rather the cardiac contractions, and is therefore called the "Pace Maker."

Under normal conditions, all cardiac activity is initiated by this node and directly or indirectly is the result of the exercise of this nodal function. In various cardiac derangements stimuli to contract may originate elsewhere, invariably, however, producing an abnormal mechanism. The further removed from this node the area producing such abnormal stimuli, the more slowly they are generated. The ventricles possess this function in a relatively slight degree and if exercised it produces a rate very much slower than that which comes from the sino-auricular node. In other words the venous end of the heart is very active while at the apex this function is only slightly developed.

The stimuli originated at the venous end of the heart to be effective must be propagated over the heart in an orderly and regular manner. The stimulus waves originating in the sino-auricular node spread from above downward and from right to left over the walls of the auricles, exciting them to contract. This excitation wave reaches the ventricles, not by direct extension over the heart walls, as in the case of the auricles, but by the way of a special conducting system, as is shown in the diagram. This excitation wave after passing over the walls of the auricles collects or passes to a point called the node of Tawara, or the auriculo-ventricular node, and it is at this point that the conducting system originates. This node is located low down in the wall of the right auricle posteriorly beneath the endocardium. The continuation of this node is called the bundle of His. This connecting band after a short course divides like a hair pin into two main branches, the right and left. The branches lie on either side of the septum separating the ventricles and run parallel with their respective cavities. These branches subdivide till they form a network throughout the whole ventricular walls.

We note then that the continuity is not broken, and, though called by different names, it is still composed of the same highly specialized tissue as the sino-auricular node. Hence it must be

understood that this special conducting system is the only pathway by which the functional activity originating in the sino-auricular node and conducted over the auricular walls may be farther conducted to the ventricles. This neuro-muscular band, originating in a node and continued through the branches to all parts of the ventricles, is the bridge that connects the auricles with the ventricles.

This conduction system receives its blood supply from a special branch of the right coronary artery. The sino-auricular node receives fibers from the branches of the right vagus and the auriculo-ventricular node receives fibers from the left vagus. A similar division of the right and left accelerators occurs.

Contractility. This is obviously the most necessary of the myocardial functions; however, the contractions of the heart are dependent upon the exercise of certain other functions of the myocardium. It is to be remembered that the stimulus wave and the contraction wave are the result of the exercise of separate and distinct functions although necessarily there is normally an intimate and immediate relation between, provided a fourth function (excitability or irritability) is present. Thus we have four myocardial functions closely associated that produce a normal heart beat, namely, stimulus production, conductivity, excitability, and contractility. Interference with any of these will affect in different ways and varying degrees the cardiac cycle.

We note that this cycle is made up of a series of events initiated by the sino-auricular node generating stimuli in regular order, the stimuli being conducted along a definite pathway to all parts of the auriculo-ventricular myocardium and resulting in a contraction of the heart from above downward in such a way as to make its muscular and valve actions most effective in propelling the blood onward into the vascular system. The contracting of the auricles before the ventricles completing the filling of the latter chambers increases the heart's efficiency.

Departure from the normal mechanism of cardiac contraction will result in interference with the work of the heart and the signs of disturbance of one or more of its functions. The time elapsing between the beginning of auricular contraction and ventricular activity constitutes a measure of the activity of the conducting system and this may be absolutely determined by the

electrocardiograph. The normal conduction time does not exceed two-tenths of a second.

Heart bloc then is the mechanical derangement of the heart's contractions caused by impaired function of the conducting system, resulting in circulatory impairment of various degrees. The loss of the function on the part of the bundle and its branches may be of any grade. With slight involvement there may be evident only slight delay in conduction time beyond the normal, more extensive damage may result in a greater or less number of auricular beats failing to excite a corresponding number of ventricular beats and this condition is known as partial heart bloc.

If the damage is so extensive as to produce a complete loss of function of the conducting system we have then a complete dissociation between the auricles and the ventricles and this condition is known as complete heart bloc, and here the auricles and ventricles each beat with their own time and rhythm. In complete heart bloc the ventricles beat with their own inherent stimulation and usually at the rate of about thirty to the minute and this rate is not affected by influences that usually affect and quicken the heart.

Complete heart bloc, if it continue for any length of time, has a very unfavorable prognosis. In partial heart bloc the usual rate is two to one; that is, the ventricles beat just half as often as the auricles. The milder forms of heart bloc can only be told by means of the electrocardiograph. Partial and complete heart bloc may alternate, the change from one rhythm to another occurring frequently.

It is unnecessary to enumerate the symptoms of heart bloc and I will only say that ventricular inactivity for three or four seconds will cause a feeling of dizziness or goneness; syncope will result from a silence of eight or nine seconds. After a silence of fifteen or more seconds, owing to the action of carbon dioxide on the motor centres of the brain, tonic and then clonic convulsions will appear in the muscles of one side of the face and arm. These usually come on without warning and the patient may suddenly fall. They may be distinguished from epilepsy, as there is no warning cry, no nausea or vomiting, biting of the tongue or loss of control of the sphincters.

Treatment. In the treatment of valvular disease of the heart

we must, as in many other diseases, treat each case on its own merits. Because when we listen to a patient's heart and hear a murmur it is no sign that patient needs a course of digitalis. We must go into the history of the case and find out if possible whether the heart condition is primary or secondary.

In a short paper of this kind it is impossible to say much in regard to treatment except in a general way. I wish however to give you ten reasons for treating the heart. If you have a patient with a heart lesion who shows one or more of these conditions it is an indication that you should look after the heart; if none of them are present it is pretty good evidence you should not treat the heart but that you should look to some other organ for the existing trouble. The indications are: (1st) Dyspnœa, (2nd) Cyanosis, (3rd) Oedema, (4th) Hæmoptysis, (5th) Large Liver, (6th) Anginal Pain, (7th) Diminished pulse taken while the arm is in the upright position, (8th) Auricular Fibrillation, (9th) Cough, (10th) Insomnia and Hallucinations.

In general, digitalis should be used in diseases of the left heart and convallaria in disease of the right heart. Another general rule in giving digitalis: it is best, if giving it for any length of time, to give it only five days out of each week. A good plan to follow is the first day to give one grain of calomel in tenth-grain doses, the next five days to give your digitalis and on the last day of the week to repeat your calomel in the same way. When giving digitalis it is advisable at least to give occasional doses of calomel. If using the tincture a good way to prescribe it is in a half ounce of Fairchild's essence of pepsin.

Mitral regurgitation is the most frequent of all valvular troubles, estimated to be about eighty-five per cent. In this condition we recognize three stages: (1st) where the murmur is heard at the apex and not transmitted, (2nd) where the murmur is heard at the apex and transmitted to the nipple, in the fifth interspace to the axilla, and is heard at the back at the angle of the scapula, (3rd) the second stage plus symptoms of failure of compensation, such as dyspnœa œdema, etc. The first two stages, unless an acute condition, call for no treatment; if acute, rest in bed, small doses of digitalis with calomel, and, as the greatest number of cases are due to rheumatism, give twenty grains of sodium salicylate with twenty grains of sodium bicarbonate three times a day for at least a month or two.

In the third stage, if symptoms of decompensation are very marked and the patient is in a desperate condition, we may use very large doses of digitalis. One drachm of the tincture may be given, and if no improvement follows, it may be repeated in twelve hours and as many as three or four such doses may be given at twelve-hour intervals; after that reduce the dose to thirty or forty drops, later to twenty, and continue at that dose.

Mitral stenosis presents two stages which may be termed (1st) bad, (2nd) worse. This trouble needs treatment in both stages. In the first stage do not use digitalis but use tincture of strophanthus, five or ten minims, three times a day. It is twice as strong as digitalis and unless of good quality will produce diarrhœa. Later give the strophanthus twice daily and later only once at night. There is only one indication where digitalis should ever be used in the first stage and that is when it is accompanied by auricular fibrillation; then you give twenty minims of the tincture three times a day. In the second stage use tincture of digitalis in forty minim doses, *t. i. d.*, and gradually reduce to twenty minims, *t. i. d.*

In aortic regurgitation, the first stage, in which the murmur alone is present, is very short, lasting about ten weeks, and during this stage no treatment is needed other than rest, but in the second stage, where you have dizziness, insomnia, dyspnœa, etc., there has been a good deal of discussion as to whether digitalis is indicated or not, as it prolongs the diastole and theoretically is not indicated; but I believe now that most men think that digitalis is the drug to use. You must begin with the minimum dose and increase one drop each day till you reach twenty drops, then reduce the dose in the same way, never giving more than twenty drops to the dose. If you have sclerosed arteries with this condition it may be well to combine it with nitroglycerine.

Oedema may result from the failure of compensation, both in the right and left heart. With this present in only a mild degree put the patient to bed and give tincture of digitalis, twenty minims, *t. i. d.*, preceded by calomel in the method spoken of earlier in this paper. When the œdema is great, causing the so-called dropsy, we may use several different treatments: (first) the calomel treatment, which consists in giving three grains of calomel three times a day for three days. You will not get more

than four to six bowel movements but will get very marked effect on the kidneys. In using this treatment you must use a mouth-wash every hour of potassium permanganate, one to one thousand and give five grains of sodium bicarbonate with each dose of calomel to prevent ptyalism. The calomel treatment does not work so well after the dropsy has recurred three or four times.

In children the same treatment may be used, giving the calomel in one and one-half grain doses. There is only one contraindication for this treatment and that is a chronic nephritis of the parenchymatous type where there are much albumen and many casts. Any heart patient of long standing will show albumen in the urine and this should not be mistaken for nephritis, hence use calomel if only traces of albumen in the urine.

The second method, indicated in extreme cases: take six grains of calomel, three drachms of compound jalap powder and three-tenths of a grain of elaterium, divide into three powders and give one powder every two hours till all are taken. This acts more on the bowels than on the kidneys.

The third method. This is used in cardiac or renal dropsy or a combination of both. Give diuretin in twenty grain doses every two hours till twelve doses are given, then stop. May use this in children in five-grain doses.

The fourth method consists in giving the Neahmiah or Tyson pill and this contains calomel, one-quarter grain, extract of squills, one grain, powdered digitalis leaves, one grain. Give one every three hours till twelve are taken. This pill is said to be the same as the much advertised anasarcin tablet.

The fifth method is by the use of apocynin, which is given in the so-called cymerin tablet, which is silver-coated. The dose is one or two tablets every three hours. This is a cardiac stimulant and you do not need to use digitalis while giving this.

Without going farther into the treatment of these heart conditions we might sum up by saying that digitalis is indicated in all conditions of cardiac insufficiency where the heart is unable to carry on the circulation, remembering that under no conditions can digitalis increase the absolute power of the heart—it merely enables it to use to better advantage the power it has left.

Before closing this paper I wish to say a few words in regard to the pulmonic area of which I neglected to speak earlier. The

pulmonic area, sometimes called the "Area of romance," is extremely interesting. In mitral stenosis it is of value in two ways: first, there is a marked accentuation of the second pulmonic sound; second, in advanced cases, there is a strong heaving impulse visible in this area.

The accentuation of the second pulmonic sound is of material help in the diagnosis of mitral insufficiency. It is never absent except in cases of extreme dilatation of the right heart. The accentuation of the second pulmonic sound has considerable differential value. Suppose a systolic murmur is heard over the apex and is not transmitted anywhere. The question arises, is the murmur an indication of mitral regurgitation or is it a functional murmur? The presence of an accentuated second pulmonic sound would stamp the murmur as organic while its absence would argue in favor of a functional murmur.

The accentuation of the second pulmonic sound is one of the very early signs of incipient pulmonary tuberculosis and is rarely absent. It is, however, only present in early cases. It is not known to exist in advanced cases. Hence accentuation of the second pulmonic sound suggests two widely separated conditions; mitral disease and early tuberculosis of the lungs. As mitral disease can be easily ruled out, the pulmonic accentuation calls for the examination of the lungs, especially the apices.

The pulmonic area plays an important part in the prognosis and treatment of pneumonia. It is known that in pneumonia the heart is more important than the lungs and that the right heart is more important than the left. Most deaths from this disease are caused by failure of the right heart. The strength of the right heart is measured by the accentuation of the second pulmonic sound.

As long as that sound is louder than the second aortic and as long as that sound is thumpy the patient is doing well; just as soon however as the pulmonic second begins to weaken there is ground for alarm; when that sound becomes inaudible the prognosis is very grave. In the treatment, so long as the second pulmonic is accentuated, and as long as the valves close with a thud, the heart needs no stimulation, but the slightest impairment of the accentuation is the signal for the administration of stimulants. Marked impairment is the summons for the employment of continuous and powerful heart stimulants.

Public Health

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.
BUREAU OF VITAL STATISTICS.

Edited by Arthur Sautter, M. D.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

DEATHS FOR THE MONTH OF OCTOBER, 1919.

Consumption	9	Eright's Disease	9
Typhoid Fever	1	Apoplexy	8
Scarlet Fever	0	Cancer	12
Whooping Cough	0	Accidents and Violence	14
Measles	0	Deaths under 1 year	11
Diarrheal Diseases	0	Deaths over 70 years	26
Pneumonia	4	Death rate	13.71
Broncho Pneumonia	6	Death rate less non-residents	10.54

Deaths in Institutions.

	Non. Res.	Res.		Non. Res.	Res.
Albany Hospital	15	10	Public Places	1	3
Albany Hospital Camp.	1	1	St. Margaret's House	1	1
Albany County Hospital	1	1	St Peter's Hospital	3	6
Child's Hospital	2	..		—	—
Homeopathic Hospital	4	6		29	34
Hospital for Incurables	1	1	Births		197
Home for the Aged	0	2	Still Births		10
Maternity Hospital	0	3			

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	2	Tuberculosis	16
Scarlet Fever	17	Mumps	12
Diphtheria and Croup	10	Pneumonia	14
Chickenpox	11	Influenza	16
Smallpox	0	Septic Sore Throat	18
Measles	6		—
German Measles	0	Total	127
Whooping-cough	5		

Number of days quarantine for scarlet fever:

Longest 31 Shortest 30 Average 30½

Number of days quarantine for diphtheria:

Longest 17 Shortest 11 Average 15

Fumigations:

Rooms 116 Buildings 17

Milk bottles disinfected 82

Communicable Diseases in Relation to Schools.

	D.	S.F.	M.
Public School No. 4.....	..	4	..
Public School No. 5.....	..	1	..
Public School No. 7.....	1	..	..
Public School No. 10.....	..	1	..
Public School No. 18.....	1	..	..
Public School No. 22.....	..	1	..
St. Joseph's Academy .....	..	5	..
St. Ann's School .....	..	1	..

MISCELLANEOUS.

Cards posted for communi- cable disease	20	Inspections and reinspections	46
Cards removed	12	Vaccinations	47
Notices served on schools...	95	Vaccination dressings	139
Notices served on stores and factories	8	Children examined for em- ployment certificates.....	35
Postal card returns sent to doctors	20	Number of employment cer- tificates issued	35
Postal card returns received from doctors	12	Taking specimens of blood for Wassermanns	8
		Taking smears for Gonococci	6

Tuberculosis.

Living cases on record October 1, 1919.....	898
Cases reported:	
By card	16
Dead cases by certificate	0
	16
	914
Dead cases previously reported	9
Dead cases not previously reported	0
Removed	4
Died out of town.....	0
Recovered	0
Unaccounted for	0
	13
Living cases on record November 1, 1919.....	901
Total tuberculosis death certificates	9
Non-resident deaths:	
Albany Hospital Camp	2
C. F. L. Pavilion.....	0
County Hospital	0

St. Margaret's House	0	
City at large	0	2
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Resident deaths		7
Visits to cases of tuberculosis.....		12
Miscellaneous visits		0

LABORATORY REPORT.

Diphtheria.

Initial Positive	36	Unsatisfactory	5
Initial Negative	261		
Release Positive	12	Total	323
Release Negative	9		

Sputum for Tuberculosis.

Positive	49	Unsatisfactory	1
Negative	116		
			<hr/>
Total			166

Widals.

Positive	0	Unsatisfactory	1
Negative	15		
			<hr/>
Total			16

Meningococcus.

Positive	0	Negative	0
			<hr/>
Total			0

Wassermann tests	328	Gonorrhoea examinations....	65
Milk analyses	205	Miscellaneous examinations.	1
Water analyses	0		
Pathological examinations..	0	Total examinations.....	1,104

HEALTH PHYSICIAN'S REPORT.

Cases assigned	29	Calls made	53
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DIVISION OF SANITATION.

Inspections	32	Reinspections	44
Plumbing	10	Plumbing	8
Sanitary	22	Sanitary	36

HEARINGS.

Hearings	3	Refuse	1
Cases heard	4	Filthy premises	1
Chicken	1	Drain	1

Disposition of Cases.

Reinspections	4
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DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections	145	Smoke	0
Old Houses	87	Blue or red	0
New Houses	58	Peppermint	5
Permits issued	63	Water test	11
Plumbing	52	Houses examined	19
Building	11	Re-examined	44
Plans submitted	17	Valid	12
Old buildings	10	Without cause	7
New buildings	7	Violations	0
Houses tested	16		

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	7	Cats removed	67
Dogs removed	26		
		Total	100

DIVISION OF MARKETS AND MILK.

Public market inspections	19	Milk cans inspected	453
Market inspections	106	Milk cans condemned	0
Fish market inspections	9	Lactometer readings	78
Fish peddler inspections	0	Temperature readings	78
Slaughter house inspections	3	Fat tests	0
Rendering establishment inspections	4	Sediment tests	142
Pork packing house inspections	0	Chemical tests	0
Hide house inspections	0	Cows examined	1,535
Milk depots inspected	15	Cows quarantined	4
Stores inspected	40	Cows removed	16
Dairies inspected	143	Complaints investigated	5
		Milk houses inspected	143

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—STATISTICS FOR OCTOBER, 1919.—Number of new cases, 394; classified as follows: General nursing cases, 222; (a) charity, 94; (b) moderate income cases, 50; (c) metropolitan cases, 78; prenatal cases, no charge, 34; dispensary social service, 35; tuberculosis, 49; venereal disease, 13; hospital social service, 75; cases carried from last month, 433; total number of cases carried during month, 827. New cases classified as to disease: Medical, 48; surgical, 42; obstetrical, 0; still births, 1; babies, 53; miscarriage, 1; abortions, 2; (a) prenatal, 34; (b) confinement, 46; (c) maternity, 9; tuberculosis, 49; hospital social service, 75; venereal, 13; dispensary social service, 35; no diagnosis, 2.

Visits for Nurses (all departments).—Number of visits with treatment, 1,517; number of social service visits, 474; number of prenatal visits, 108; number of tuberculosis visits, 219; number of other visits, 272; number of visits for supervision, 48; number of venereal disease visits, 6; number of hospital social service visits, 217; total number of visits, 2,724.

General Nursing Department.—Cases reported by: physicians, 98; metropolitan agents, 35; dispensary, 12; home social service department, 34; patients or family, 43; other sources, 11; Albany Hospital social service department, 41; nurses, 23. Disposition of cases: Removed to hospital, 9; discharged cured, 61; discharged unimproved, 14; discharged to dispensary, 2; died, 7; discharged improved, 58; discharged to other care, 6; number of patients still under care, 625; (nursing, 121; venereal diseases, 31; social service, 81; dispensary social service, 0; tuberculosis, 391; total, 625); number of patients still under supervision: Venereal diseases, 53; social service, 63; tuberculosis, 235; number of cases carried into next month, 976.

Dispensary Report.—Number of clinics held, 89; number of new patients, 124; number of old patients, 573; total number of patients treated, 697. Classification of clinics held: Prenatal, 3; eye and ear, 18; venereal, 8; tuberculosis, see lung; dental, 0; surgical, 11; medical, 8; lung, 8; stomach, 0; nose and throat, 9; skin and genito-urinary, 4; gynecological, 8; neurological, 3; pediatrics, 6; total, 86.

Special Tuberculosis Department.—Number of patients under supervision not tubercular 0; number of tubercular patients under supervision, 0; disposition of cases: Number of patients sent to hospital, 3; number of patients returned from hospital, 1; number of patients died, 6; number of patients discharged, 0; number of patients getting relief, 6.

Hospital Social Service Department.—Number of new cases investigated, 75; number of new cases carried from last month, 28; total number of cases under care, 81 in hospital; number of calls to homes, 140; number of calls to hospital wards, 39; number of calls to dispensary, 13; number of calls in co-operation, 25; total number of calls, 217. Disposi-

tion of cases: Referred to Associated Charities, 2; referred to general nursing service, 1; referred to dispensary, 10; referred to private physicians, 1; discharged dead, 3; discharged to tuberculosis department, 0; discharged O. K. to go home, 34; discharged to hospital, 0; discharged to baby welfare, 0; discharged to Home for Aged, 0; discharged to reformatory, 0; discharged to Home for Feeble-Minded, 0; discharged lost, 1; discharged, moved out of town, 0.

Venereal Disease Department.—Number of cases carried from last month, 21; new cases, 13; total number of cases under care, 34. Disposition of cases: Discharged to hospital, 1; left town to attend clinic there, 1; left with permission, 1; total, 3; still under care, 31; total number of cases still under supervision, 53.

NEW YORK AND NEW ENGLAND ASSOCIATION OF RAILWAY SURGEONS.—The twenty-ninth annual session of this association was held at the Hotel McAlpin, New York City, on October 20th, under the presidency of Dr. J. S. Hill, of Bellows Falls, Vt.

The attendance was far above the average and Dr. George Chaffee, the correspondence secretary, reports this meeting to have been one of the very best in the history of the association.

Officers elected for the ensuing year are as follows: President, Dr. Wm. B. Coley, New York City; first vice-president, Dr. J. F. Black, White Plains, N. Y.; second vice-president, Dr. Donald Guthrie, Sayre, Pa.; treasurer, Dr. James M. Hamilton, Rutland, Vt.; corresponding secretary, Dr. George Chaffee, 100 Hawley street, Binghamton, N. Y.; recording secretary, Dr. J. H. Reid, Troy, N. Y.

AN APPEAL FOR HUMAN EMBRYOLOGICAL MATERIAL, BY WILLIAM W. GRAVES, ST. LOUIS.—“In 1906 I observed certain malformations of the human shoulder-blade, and in contributions to current literature I have given them the collective name—‘the scaphoid type of scapula,’ and pointed out some of its hereditary, clinical and anatomical significance.

“Probably the most important observation connected with this type of scapula in man is its age incidence, that is to say, it occurs with great frequency among the young and with relative infrequency among the old. There appear to be two possible explanations of this fact:

“Either

“A—one form of shoulder blade changes into the other during development and growth,

“or

“B—many of the possessors of the scaphoid type of scapula are the poorly adaptable, the peculiarly vulnerable, the unduly disease susceptible—the inherently weakened of the race

“I have attempted to answer these questions by seeking evidence in various directions and one of the most important of these has been a

study of intrauterine development of shoulder-blades. My investigations in this direction have been limited by the material at my disposal, which has been inadequate for a definite solution of this phase of the problem. I am, therefore, appealing to physicians for fetuses in any and all stages of human development.

"It is desired that the material, as soon as possible after delivery, be immersed in ten per cent formalin in a sealed container, and be forwarded to my address; charges collect. Due acknowledgment will be made to those forwarding material."

727 Metropolitan Building.

PERSONALS.—Dr. JAMES C. HASSALL (A. M. C. '10), who has been a member of the medical staff of St. Elizabeths Hospital, Washington, D. C., for several years, has associated himself with the management of Fair Oak Villa, Cuyahoga Falls, O.

—Dr. CLARENCE BARTH (A. M. C. '18), is assistant physician at the Hudson River State Hospital, Poughkeepsie, N. Y.

—Dr. H. JUDSON LIPES (A. M. C. '97), who served as surgeon with the Sixteenth Field Artillery, with the rank of major, has been cited for bravery and gallantry in action, as follows:

"As regimental surgeon he voluntarily accompanied Battery 'A' to its forward position, where he was continuously under fire from enemy artillery and machine guns. Here he constantly rendered first aid to the wounded and insured successful treatment and evacuation to the rear. Throughout the entire action, Major Lipes displayed a remarkable example of fearlessness and absolute indifference to personal safety."

—Dr. JOHN J. RANDALL (A. M. C., '16) announces his purpose to resume practice on November 1, at Scotia, N. Y. After graduation Dr. Randall served as interne in New York hospitals, and in May, 1918, received a Commission as First Lieutenant in the Medical Corps of the Army and was assigned to General Hospital No. 16, at New Haven, Conn. He was transferred to Syracuse, and again to Mitchell Field, Mineola, Long Island, and has recently been discharged from service. In June, 1918, Dr. Randall married Miss Agnes Gruelick of Schenectady, formerly a nurse in the Albany Hospital.

—Dr. HENRY VIETS, who served in charge of the neurological and mental work of the United States Army Base Hospital No. 33, in Portsmouth, England, as captain, has recently begun the practice of neurological surgery with his office at 112 Marlborough St., Boston, Mass. Dr. Viets has received an appointment to the staff of the Massachusetts General Hospital, with special reference to combine service in neurology and surgery.

Current Medical Literature

NEW YORK STATE MEDICAL LIBRARY.

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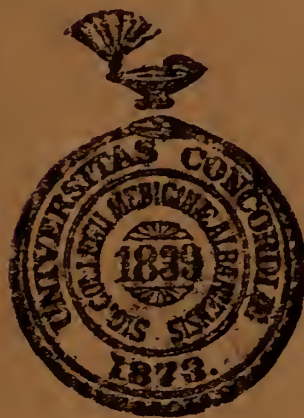
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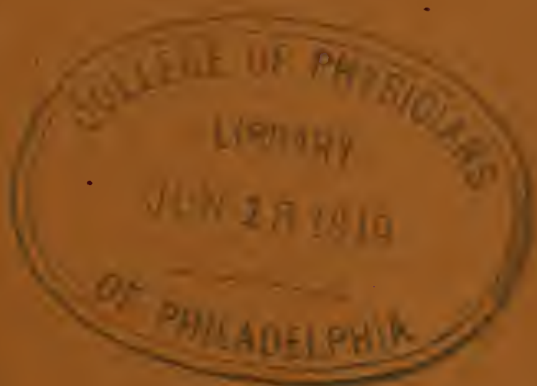
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Journal of the Alumni Association of the Albany Medical College

EDITED BY

J. MONTGOMERY MOSHER, M. D.

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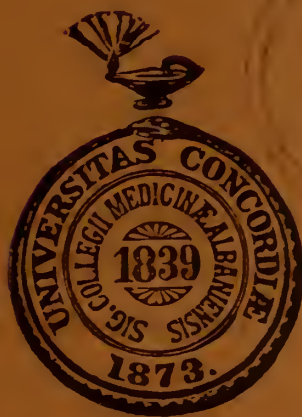
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Physician-in-Chief to the Tuberculosis Department

HOWARD VAN RENSSELAER, M. D.

Electro-Therapeutist

EZRA A. BARTLETT, M. D.

Surgeon-in-Chief

ALBERT VANDER VEER, M. D.

Surgeon

SAMUEL R. MORROW, M. D.

Ophthalmologists and Otologists

CYRUS S. MERRILL, M. D.
HERMAN BENDELL, M. D.

Dermatologist

FREDERIC C. CURTIS, M. D.

Attending Staff

Physician

THOMAS ORDWAY, M. D.

Physician for Mental Diseases

J. MONTGOMERY MOSHER, M. D.

Gastro-Enterologist

LEO H. NEUMAN, M. D.

Neurologist

LA SALLE ARCHAMBAULT, M. D.

Physician for Cutaneous and Contagious Diseases

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Physicians to the Tuberculosis Department

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MALCOLM DOUGLASS, M. D.

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Gynecologist

JOHN A. SAMPSON, M. D.

Rhinologist and Laryngologist

EUGENE E. HINMAN, M. D.

Ophthalmologist and Otologist

ARTHUR J. BEDELL, M. D.

Obstetricians

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H. JUDSON LIPES, M. D.
PAUL T. HARPER, M. D.

Orthopedist and Radiographer

JOHN M. BERRY, M. D.

Urologist (Surgical for Men)

JAMES N. VANDER VEER, M. D.

Associate Staff

Electro-Therapeutist

WM. G. LEWI, M. D.

Dentist

LEROY BLATNER, D. D. S.

Assistant Attending Staff

Assistant Attending Physicians

CLINTON B. HAWN, M. D.
L. WHITTINGTON GORHAM, M. D.

Assistant Attending Gastro-Enterologist

THEOBALD F. DOESCHER, M. D.

Assistant Attending Neurologist

NELSON K. FROMM, M. D.

Assistant Attending Physician for Contagious Diseases

CHARLES K. WINNE, M. D.

Assistant Attending Physician to the Tuberculosis Department

JACOB L. DROOZ, M. D.

Assistant Attending Surgeons

ALVAH H. TRAVER, M. D.
WM. D. ALLEN, M. D.
J. LEWI DONHAUSER, M. D.

Assistant Attending Gynecologist

TIFFANY LAWYER, M. D.

Assistant Attending Laryngologist

WM. G. KEENS, M. D.

Assistant Attending Urologist (Surgical for Men)

JOHN HESLIN, M. D.

Assistant Attending Ophthalmologist and Otologist

CHARLES H. MOORE, M. D.

Dispensary Physicians and Surgeons

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J. LEWI BENDELL, M. D.
JOHN F. SOUTHWELL, M. D.
J. MONTGOMERY MOSHER, M. D.
TIFFANY LAWYER, M. D.

WM. G. KEENS, M. D.
CHARLES H. MOORE, M. D.
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Albany Medical College

Clinical Facilities: The hospital services are directly under control of the Medical College. There are teaching services both in Medicine and Surgery, and the students have immediate responsibility under supervision.

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